A Catalog of

RECENT MOLLUSCA

from ALL PARTS *of* THE WORLD

1225 ILLUSTRATIONS

Fourth Edition

Published by WALTER F. WEBB
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PREFACE

This price catalog of Sea Shells is issued for sale in book, shell and novelty stores throughout the nation.

It is divided into three sections. East Coast Marine Shells, West Coast Marine Shells and Foreign Marine Shells.

Latin names are universal throughout the world and are given first. Common name follows where same has been standardized, then Locality, Description and Price. Localities may vary greatly. Prices will vary according to size and perfection of specimen and may be either lower or higher than listed herein.

In sending orders to a dealer, latin names should be carefully copied and then you are sure to get what you want. Common names vary with locality. A shell from the Philippines may have an entirely different common name than from Australia. Play safe and use latin names only.

Only Marine shells are listed herein and as there are about 50,000 kinds in the world, this catalog is only a beginning. There are a number of good books on shells on the market in this country, England and Australia in the English language and many other books in foreign languages.

If you wish a more extensive library write the author or firm you bought this book from and you will receive the information you wish.

There is no set of books which covers all the kinds of shells in the world and never has been as yet. A catalog of simply the names would fill 2000 pages.

From this brief information you will see you have embarked on a great hobby, and the least expensive of any nature hobbies. It has never been possible to spend the money on shells as on coins or stamps and no individual shell has ever sold in the past 100 years at any fabulous price.

The highest price paid in recent years for any one shell is $500 and that was for a shell of which less than a dozen perfect specimens were known whereas a single coin or stamp has sold for over $10,000.

We have many collectors in our country who only collect one genus like Oliva, Conus, Murex, Mitra, etc. A few collectors specialize on BIG shells like 12" or more. Many others only collect shells of one inch down to very minute which can only be studied with a good magnifier.

As about 80% of all the shells of the world are small to minute, the collector of this class always has much the larger collection. One advantage is it takes less room, few varieties are expensive, and the form and color are always equal to larger shells.

As the tendency of the present generation is for smaller homes or apartments, small shells are recommended as far as possible.

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PLATE 1

1. **Cassis madagascarensis,** Lam. Queen Helmet, N. C. to West Indies. Aperture a rich black, from which fine cameos have been and are still made. Usual size 5 to 7", but specimens up to 12" have been found. 5 to 6" $2.50 7-8" 4.00

2. **Cassis tuberosa,** L. King Helmet. N. C. to West Indies. The face of the shell is a rich dark color, and aperture has 6 or more prominent ridges. As will be seen from illustration, it is of a triangular shape. 5 to 6" but has been found to 12". 5 to 6" 3.00

3. **Cassis flammea,** L. Princess Conch. S. C. to West Indies. Usually matures at 4" but larger specimens are found. A fine, always smooth shell and seldom found with marine incrustations as are other forms. 3" 75c 4" 1.25

4. **Cassis inflata granulosa,** Brug. Scotch Bonnet. Florida to West Indies. The true form inflata is also found from N. C. southward. This is the species most commonly seen for sale in the shell stores. A round, neat shell, quite typical in shape to other forms from tropical regions. 2" 50c

5. **Cassis testiculus,** L. Granular Cassis or Baby Bonnet. N. C. to West Indies. A neat, round, oblong form that is more common in Bahamas than in Florida Keys. Of a russet color, it is a showy species when well cleaned. 2½" 1.00

6. **Strombus gigas,** L. Great Conch. Lake Worth, Florida to West Indies. Next to the largest known form of the genus, it is widely distributed in the Bahaman region, and is much used for food. The shells find a ready market and have for generations. Gorgeous cameos are cut from the pink interior. The shells are made into electric lamps and are sold in curio stores. 6-7" 1.25 7-8" 2.50

7. **Turbinella scolymus,** Gmel. Lamp Shell, Florida Keys to West Indies. One of the largest shells of its range, and the largest of the genus. Usually 7 to 8 inches but larger shells are found. Its surface is of a shiny-yellow when well cleaned. A notch is often cut in the side, to show the peculiar auger-shaped columella. 6" 2.00 8" 4.00

8. **Fasciolaria tulipa,** L. Tulip Shell. N. C. to West Indies. In the Bahamas the fishermen call them Pepper Shells. There are rough forms, the usual type and others brilliantly glossy. A variety has been named, decades ago, Schaepmakeri, Dunk. Usual size 4" but 8" specimens are interesting and should be saved when collecting. 4-5" 35c 6" 50c

9. **Triton nobilis,** Con. Trumpet Shell. Bahamas. A fine, large, well-marked shell, often of a rich color. Occasionally found on Florida Keys. The last whorl is shouldered, differing in this respect from its cousin of the East Indies. Shells range 6 to 7" but much larger specimens are found. 6-7" 4.00 8-9" 6.00

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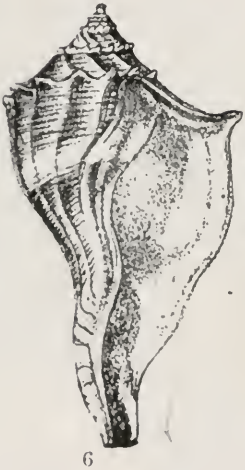

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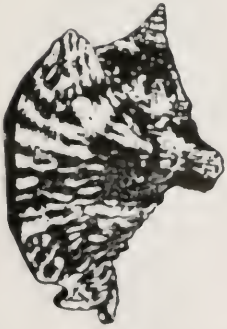

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PLATE 2

1. **Voluta junonia,** Hwass. Spotted Volute. Florida Keys and Gulf of Mexico. Usually in deep water. Only occasionally found on shore line. For many years it was excessively rare and brought $50 or more. A handsome shell covered with a thin periostracum. 2½ to 3½". 3" 3.50 4" 5.00

2. **Voluta virescens,** Sol. Dotted Volute. Texas and West Indies in very deep water. A rare form only occasionally seen. When Florida waters are more thoroughly dredged, it will likely be found to be common. 2¼". Rare.

3. **Fulgar canaliculatum,** L. Common Pear Fulgar. Massachusetts coast to St. Augustine, Fla. Very common in its northern range. Usually 3 to 4" but larger specimens are common. Its strings of egg cases are often found on shore line. 4" 75c 6" 1.00

4. **Fulgar perversa,** L. Left-hand Fulgar or Lightning Shell. Florida and Texas. A most remarkable shell in many respects. It is the only sinistral marine shell in the world that is common. Color shades run from brown to red, the latter color being rare. Usual size 4 to 7" but specimens are found up to 12". Albino shells are fairly common.
4-5" 50c 5-6" 75c
6-7" 1.00 8-10" 1.50

5. **Fulgar pyrum,** Dill. Fig Shell. N. C. to Texas. A thin brilliantly-marked shell usually about 3" but much larger specimens are found. The periostracum must be removed to show the bright colors. 3-4" 50c 5" 1.00

6. **Fulgar eliceans,** Mont. Right-handed Fulgar. N. C. to Florida. A comparatively rare shell and is believed to be a variety of F. carica of Mass. It ranges up to 7 or 8", yellow inside. Differs entirely from the dextral form of perversa which is occasionally found.
3-4" 1.00 5-6" 1.50 7" 2.50

7. **Conus proteus,** Hwass. Alphabet Cone. All Florida coast line and West Indies. The largest species of the genus in its range, and a very attractive shell. Most specimens are similar to the illustration. 2 to 2½" 1.00

8. **Fasciolaria distans,** Lam. Banded Tulip, N. C. to Texas. A striking shell with usually smooth surface, of a bluish-gray color with white stripes and circular almost black lines.
2" 25c 3-4" 1.00 Color form 2.00

9. **Strombus costatus,** Gmel. Milk Stromb. Florida Keys and West Indies. The shell is of a milk-white, with thin, yellowish periostracum. A fine solid species in good demand. 4" 75c 5-6" 1.00

10. **Ficus papyratia,** Say. Paper Fig Shell. N. C. to Gulf of Mexico. Usually 3 to 4", little rough outside and almost translucent. There are 10 species known throughout the world. 3" 50c

11. **Triton femorale,** L. Angular Triton. Southern Florida to West Indies. Not common, but is a very unique and distinct species, light brown color. Divers bring them up from the coral reefs. 6 to 7". 3.50

12. **Triton olearium,** Desh. The Hairy Triton. Nova Scotia to West Indies. The periostracum is usually of a hairy nature, but the shell when cleaned is smooth and ridged. Color, light brown. 3 to 4" and not real common. 1.00

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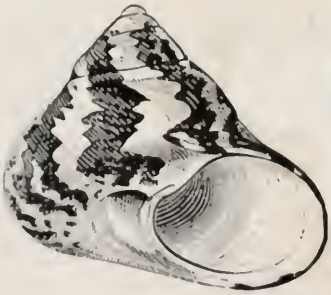

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PLATE 3

1. **Vermicularia spirata,** Phil. Worm Shell. Mass. to Florida and Texas. All worm shells are very curious in form. This species lives point down and often in clusters like next cut. There are about 125 species in the world and this is one of the finest. 5 to 7" 50c

2. This illustration is to show how the species form in masses, sometimes a foot or more in diameter. Often deep in the sand beaches.

3. **Colus islandicus,** Gmel. The White Colus. Labrador to Maine. Also circumboreal. Typical of a number of cold water shells, most of which have a horn-colored periostracum. There are 75 known species. 3" 50c

4 and 5. **Melongena corona,** Gmel. The Crown Shell. Indian River, Florida, south to Keys. Neither of these illustrations shows a typical shell but rather some of the 8 known types. Some of the forms only attain 1½" and others usually run 3 to 4". 3" 50c 4" 1.00

6. **Dolium (Tonna) perdix,** L. Mottled Cask or Partridge Shell. Florida Keys to West Indies. A handsome mottled 4 to 5" shell, with large aperture. I have had exactly similar specimens from various parts of the Pacific and am inclined to believe it is a world-wide species. 3 to 4" 1.00 5-6" 1.50

7. **Xenophora conchyliophorus,** Born. The Collectors Shell. Lake Worth, Fla. Has recently been found in some numbers in this locality. It is also found in Japan and other places. The shell actually grows other shells and pieces of shells, coral fragments, etc. to its own shell. A remarkable habit. Camouflage perhaps. 3½". 5.00

8. **Livonia pica,** L. Magpie Shell. South Florida to West Indies. In shape it resembles a Turbo and used to be classed with that genus. It is a solid pearl shell with zigzag stripes of white and black. When polished it shows spaces of both black and pearl, if not cut too deep. It attains 3 to 4" and has a leathery operculum. 2-3" 50c 3-4" 1.00

9. **Thais patula,** L. The Dye Shell. South Florida to West Indies. A dark knobby species with an aperture almost the whole length of the shell. Its operculum only partly fills same. It lives on rocks. When disturbed the mollusk gives off drops of a milky fluid, which on white cloth first turns a metallic green and later to a permanent royal purple. There are about 160 species scattered over the world, all closely allied to the Murex family. 2 to 2½" 50c

PLATE 4

1. This is an egg mass of the **Fasciolaria gigantea.** They are usually about 3″ in diameter and 6″ or more long, made up of a large number of thin capsules which contain the embryos. When the capsules are about to hatch, they burst open at the top and the young emerge by the thousands most of which are usually gobbled up by the swarms of fish. 1.00

2. **Fasciolaria gigantea,** Kien. Band Shell or Horse Conch. Gulf of Mexico. One of the two largest marine univalve forms in the world. The other species of a different genus will be mentioned in the foreign section of this book. This species is truly a gigantic shell. Ordinary specimens run 12″ and are more common and less expensive than the larger shells which seem to be becoming rare. Old fishermen tell me you have to go to very deep water to find the really big 24″ specimens. It has a very thick, heavy periostracum which is often removed to show the true color of the shell. When young, the color varies from red to yellow, but these colors gradually fade to white in old age. Specimens a foot long when cleaned frequently show traces of red and yellow. 10″ 3.00
12″ 4.00 15″ 5.00

3. **Fasciolaria princeps,** Sow. Panama. A handsome russet-red shell that attains 6 to 10″ and possibly more. I am including it here among the other East Coast Marine as I suspect it is occasionally found at Key West, but Johnson did not include it in his splendid check list issued in 1934. It has a fine heavy operculum. 8″ 4.00

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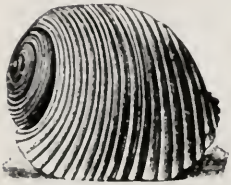

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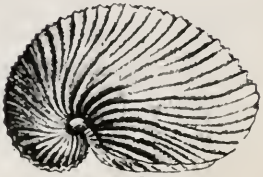

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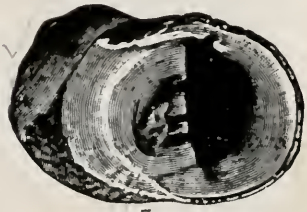

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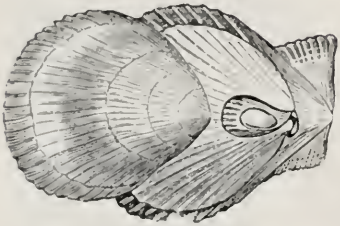

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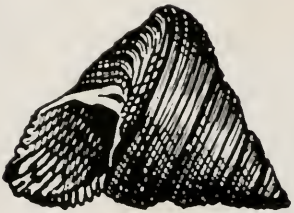

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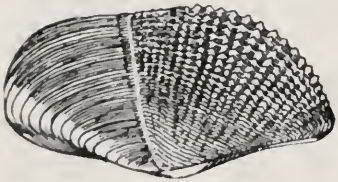

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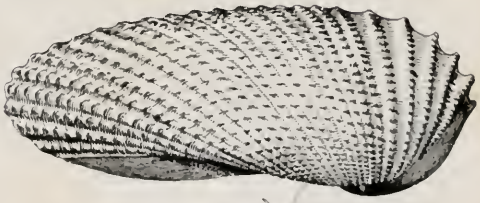

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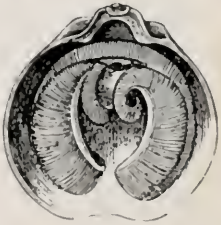

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PLATE 5

1. **Leucozonia (latirus) cingulifera,** Lam. The Knobby Cingula. Florida to West Indies. There are many types of this genus found throughout the world and this is one of the fine larger forms. 2" 75c

2. **Aporrhais occidentalis,** Beck. The Duck Foot, Gulf of St. Lawrence to No. Carolina, usually in 50 to 550 fathoms. Rarely found to any extent on the beaches but the fishermen bring them up in their nets. More are found in the stomachs of fishes. Fairly rare. 1½" 2.50

3. **Bulla striata,** Brug. Spotted Bubble Shell. Clearwater, Florida. This seems to be a favorite locality but it does not seem to be very common with the shell trade. A smooth, neat solid species, that has been reported only from this locality. 1¼" 20c

4. **Buccinum undatum,** L. Common Whelk. Labrador to N. J. Circumboreal. The shells of this genus are usually uncolored and common in cold water. Many wonderful forms have been dredged in the northland, but rarely seen in collections. 2 to 2½" 50c

5. **Dolium (Tontia) galea,** L. Channelled Cask Shell. N. C. to West Indies. A large thin shell, with round aperture. Very rarely found on the beaches and does not seem to be very common anywhere. Attains 4 to 8". Smaller shells are better marked than larger specimens. 4" 1.00 6" 2.00 8" 5.00

6. **Argonauta argo,** L. The Paper Nautilus. Mass. to Florida. The Argonauta belong to the great class Cephlapoda, which includes Octapus, Squids, etc. They are, however, closely allied to, if not true mollusca. The female Argonauta is much larger than the male, and constructs this very thin glass-like shell in which to lay its eggs. When full of eggs, she clasps it to her body and retains same until the young are hatched, when the shell is discarded and finds its way to the shores. The mollusk never lives in the shell, like other mollusks, and is never attached to it. There are some 20 species scattered over the tropical world. 2½ to 12". 2.00 per inch.

7. **Nerita peleronta,** L. Bleeding Tooth. St. Augustine, Florida to West Indies. This is one of the handsomest and finest of the some 200 forms scattered over the world. It attains nearly 2", often of most brilliant colors, and an operculum that perfectly fits the toothed aperture. 5 for 25c.

8. **Anomia simplex,** Orb. (ephippium) Big Saddle Shell. Nova Scotia to West Indies. One of the largest species of the east coast, one side flat and other convex, the flat valve being much the thinnest, as it is so often attached to some other shell. Of a horn-color. 1½" 25c

9. **Calliostoma canaliculatum,** Mart. The Channelled Top Shell. California coast. A conical ridged shell of a grayish color. Underneath it is an iridescent pearl. One of the two finest species on the West Coast. (Not found on East Coast). 1½" 35c

10. **Thais floridana,** Con. The Common Purpura. N. C. to West Indies. There are a number of variety forms in its wide range. Of a brownish color, some shells are twice as large as the type. 2" 25c 2½" 50c

11. **Zirfaea crispata,** L. The Great Piddock. Labrador to South Carolina. Usual specimens are 3", white and the two valves only touch at one spot. The shell is very thin and fragile and they burrow in the sand for protection. Also found on West Coast. 1.00

12. **Pholas costata,** L. Angel Wing Shell, Massachusetts to West Indies. A thin, white shell, fond of burrowing in the sea sand. This is one of the finest and largest species in the genus in the world, attaining as much as 7". The shell has no hinge, and there are two interior plates which hold the viscera of the mollusk in place. 4-5" 1.00 6-7" 1.50

13. **Martesia cuneiformis,** Say. Little Piddock. Connecticut to West Indies. The cut is much enlarged, as the shell is seldom over one inch and you will find them usually burrowing in colonies in a wooden plank along the sea shore. There are four species on the east coast. 25c Specimens in wood 1.00

14. **Cuspidaria costellata,** Desh. Little Dipper Shell. North Carolina to West Indies. It is usually white and of the peculiar shape shown in illustration. Most of the 28 species on our coast are from deep water and seldom seen in collections. This little fellow ranges from ½ to 1". 50c

15. **Terebratulina caput-serpentis,** L. Northern Lamp Shell. Maine. The illustration shows the interior of the shell and its peculiar structure. This interior structure separates the Brachiapods from true mollusca. The shell is of a gray color and is usually found in clusters attached to some object, such as stone or wood. 50c

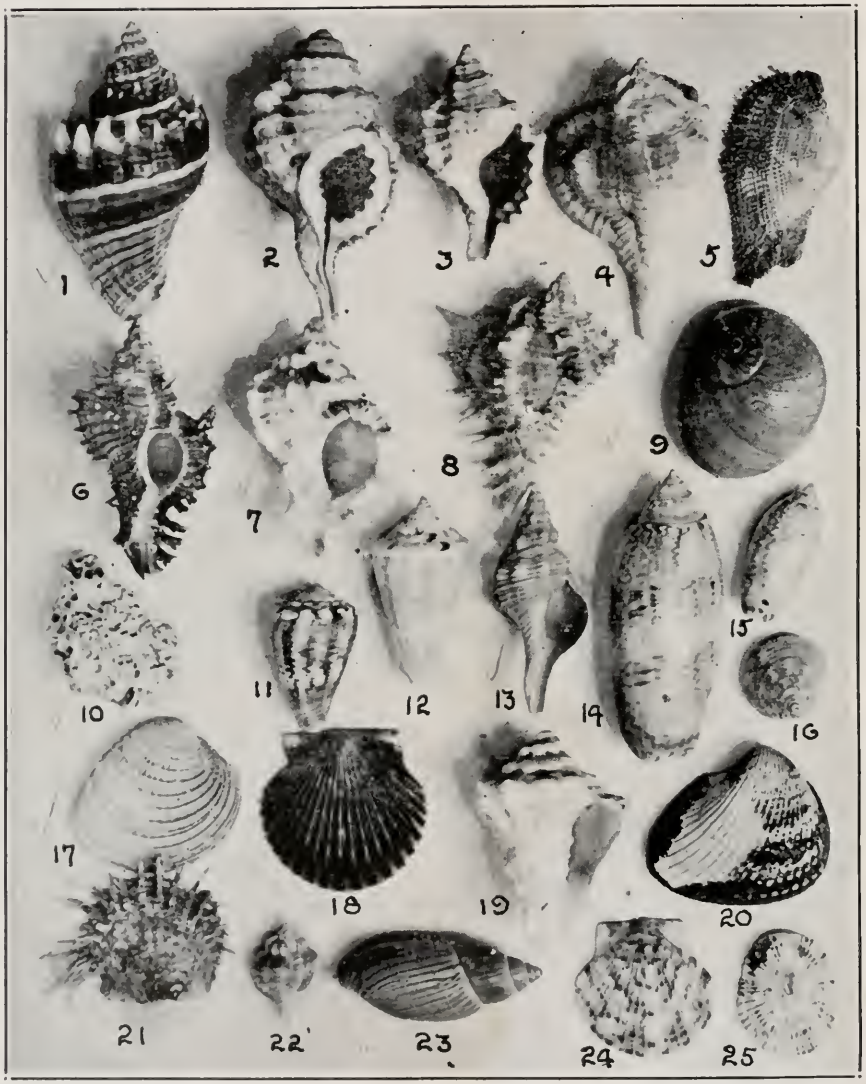

PLATE 6

1. **Melongena corona,** Gmel. Crown Shell. Typical form from West Florida. A white shell, richly adorned with bands of various shades of brown, darker on upper whorls. Usual row of spines on edge of crown and more near base. 3" 50c

2 and 3. **Triton tuberosum,** Lam. White mouth Triton. Florida Keys and West Indies. The shell is finely ridged and covered with nodules. Aperture rounded and white, with usual short canal. No 3 is a young shell not yet well developed. 2" 50c

4. **Murex cabritti,** Barnhardi. The Lined Murex. Cedar Keys to Texas and West Indies. Usually from 10 to 150 fathoms. It is white with fine lines and about 2". Rarely seen and seldom found on the shores. Rare

5. **Arca umbonata,** Lam. Mossy Ark. N. C. to W. I. A dark, finely reticulated shell with mossy surface. The base of the shell is smooth and rounded, hinge strong, which holds the valves so well together, it is often found intact on the beaches. 2 to 3" 50c

6. **Murex rufus,** Lam. Black Lace Murex. N. C. to West Indies. 1 to 30 fathoms. Usually black with three prominent rows of varices, the body lined and nodulated, of a rich brown and black. 2" 75c 3" 1.00

7. **Murex pomum,** Gmel. Apple Murex. Another and finer cut will be found on another plate, where I have shown a small mass of the eggs.

8. **Murex fulvescens,** Sow. (Spinicostata) White Spike Murex, N.C. to Fla. and W. I. Usually white and very rarely pinkish. It is the largest species of the genus on this coast and when found with large perfect spines, one of the most attractive in the world. The finest specimens I have seen come from very deep water. It attains 6" or more. 3" 1.00 4" 2.00 5" 3.00

9. **Polinices duplicata,** Say. Common Bullseye. Mass. to Gulf of Mexico. It is a smooth rounded shell, with large apertures and leathery operculum. 2 to 3" 2" 25c 3" 50c

10. **Vermetus nigricans,** Dall. Rock Worm Shell. West Florida to Fla. Keys. You often see specimens of this shell, on the shore line, which have been broken off the vast reefs, found in the southern part of the state. Like the coral, it helps to form islands. 4" 1.00

11. **Conus mus,** Hwass. Mouse Cone. Jupiter Inlet to W. I. The typical shell is streaked and mottled with brown. A rather neat little species of about 1¾". 50c

12. **Conus floridanus.** Gabb. Florida Cone. N. C. to Gulf of Mexico. A fine, mottled sharp pointed shell of which I have shown another specimen elsewhere in this book. There is much variation in color. 1¼". 50c

13. **Fasciolaria gigantea,** Kien. A young shell of rich yellow or reddish color, often found on the beaches at Sanibel and elsewhere. 3" 75c

14. **Oliva litterata,** Lam. Lettered Olive or Panama. N. C. to Texas. A glistening white shell, covered with irregular markings of gray and brown. It is usually found burrowing in the sand. Bright yellow specimens have been found and are called the Golden Olive. 1½" 20c

15. **Oliva reticularis,** Lam. Little Olive. Florida Keys to West Indies. A glistening white shell, partly covered with irregular markings of reddish-brown. Some specimens are rich pink. The pure white shells that are similar, are called olorinella, Duc. 1¼" 20c

16. **Calliostoma jujubinum,** Gmel. The Ridged Mottled Top Shell. N.C. to West Indies. A finely ridged small trochiform shell completely mottled with shades of reddish-purple. Looks exactly like some of the small tropical Trochus, so very common in the South Seas. 1" 25c

17. **Chione cancellata,** L. The Ridged Venus. N. C. to Brazil. A fine, grayish-white shell typical of many of the larger forms of the world. The interior is a rich purple. Often found very common on the shore line. 1 to 1¼". 25c

18. **Pecten irradians,** Lam. Common Scallop. Nova Scotia to Texas. The common Scallop of Commerce in the Eastern States. The northern form is a fine deeply ridged shell of a black color and balance of the shell is yellowish-white, but red and yellow forms are found. The southern form is a third smaller, of a gray color, but many shells are found with one valve gray and the other red and other combinations. The shells all die in the third year of their life. 2" 50c 3" 50c

19. **Vasum muricatum,** Born. Vase Shell. Florida Keys and W. I. It is a white shell with a thick periostracum, the only species of the genus found in this territory. Fairly common around Key West. 3" 1.00

20. **Arca ponderosa,** Say. Black Ark or Widow. Mass. to Texas. I found it one of the commonest shells at Sanibel, where perfect pairs could be seen by hundreds after storms, and usually a few at all times. The umbones are white changing to dense black at the edge. A thick, strong shell with prominent square ridges throughout. 2" 50c

21. **Margaritifera radiata,** Leach. Spiney Pearl Shell. Georgia to W. I. The finest specimens I have seen were brought up by the Sponge fisherman. They were the form of cut, but with fine string-like points often an inch long. They would always be entirely broken off if the shell was found along the shore line. It is a real baby Mother of Pearl Shell. 1" 50c

22. **Murex messorius,** Rve. Little Red Murex. Florida Keys and West Indies. A small, finely lined reddish species that is fairly common in some sections of the Sunshine State. 1" 25c

23. **Euglandina rosea,** Fer. Rosy Glandina. Florida. A fine rose-colored shell usually found on the ground in scrub, in rainy season. Scarce at other times. There is a var. minor, Binn. Both are carniverous and feed on other mollusks that are found on the ground. 2" 50c

24. **Pecten gibbus,** L. Calico Scallop. N. C. to West Indies. A small cylindrical shell finely ribbed and mottled with shades of pink. One of several fine forms of this genus. 1¼" 25c

25. **Fissurella fascicularis,** Lam. Florida Keys to West Indies. A small reddish and white shell. Commonly called the Keyhole Limpet. 1" 25c

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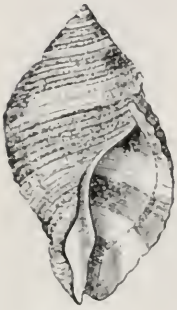

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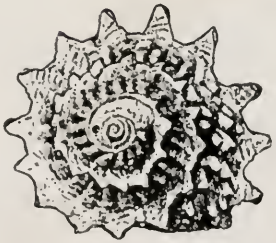

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PLATE 7

1. **Cypraea exanthema,** L. The Spotted Cowry. N. C. to Florida and W. I. Often found on the mangrove roots along the shore. This species always has ringed spots along the base. 2" 1.00 3" 2.00

2. **Cypraea cervus,** L. Micromac. Similar range to No. 1. It attains the largest size of any cowry in the world, reaching 6". The finest and largest shells all come from deep water, 10 to 20 fathoms. Like all of the more than 200 species of cowries in the world, it is naturally highly polished. The lines where the two mantles of the mollusk meet near the top of the shell can usually be seen. The blotches are often diffused and not in regular outline.
3" 2.00 4" 3.00

3. **Buccinum glacialis,** L. Glacial Whelk. Greenland to Gulf of St. Lawrence, circumboreal. A rather smooth white form, more so than most of the many species of this genus. 2" 50c

4. **Strombus pugilis,** L. Fighting Conch. All Florida coast to West Indies. It is a very common shell, often highly colored, 2 to 3". From a large series it is possible to pick various color combinations.
3" 25c

5. **Thais lapillus,** L. Little Whelk. Newfoundland to Conn. and circumboreal. A neat little species, often splendidly banded with various colors and very common on the rocky New England shores.
1". 2 for 25c

6. **Melongena melongena,** L. The Brown Crown Shell. Florida Keys and West Indies. It usually has two rows of prominent horns alternating and one row near the base, but specimens are found devoid of same. Of a rich brown color with white stripes. 50c to 1.00 ¾" 1.00

7. **Astraea imbricata,** Gmel. Tubed Turbine Shell. Florida Keys. A very attractive shell when well cleaned of foreign material, which is usually found adhering to it, in quantity. White.
2" 1.00

8. **Astraea caelata,** Gmel. Fluted Turbine Shell. Florida Keys and West Indies. A conical shell with circular rows of spines. Very much resembles some of the Trochus, to which genus this is allied. All of the Astraeas have heavy operculums. 2½" 1.00

9. **Astraea tuber,** L. Corrugated Turbine Shell. Florida and West Indies. A trochiform corrugated species often showing some color. 2½" 1.00

10. **Astraea longispina,** Lam. Spiney Turbine Shell. Florida Keys and West Indies. A splendid 2" shell with a row of saw-like teeth at base. Greenish white. All of the Astraea of the world are quite remarkable in form. 1½" 50c 2" 1.00

11. **Astraea brevispina,** Lam. Abbreviated Turbine Shell. Florida Keys and West Indies. Attains about the same size as longispina, but lacks the teeth like projections. Usually white. 1½" 50c

12. **Neptunea decemcostata,** Say. The Channeled Whelk. Nova Scotia to Mass. It lives among the rocks in deep water and rarely found on the shore line in good condition. The fishermen bring up most of the specimens seen with their nets. A cold water species. 2½" 1.00

13. **Natica canrena,** L. The Spotted Bulls-eye. N. C. to West Indies. One of the most attractive of the Natica family, which comprises some 350 forms in the world. The true Naticas all have a shelly operculum and the Polinices (which used to be called Naticas) have a leathery operculum. 1½" 50c 2" 1.00

14. **Ovula intermedia,** Sow. The Florida Weaver. Sarasota, Florida. It is 1¼" white and seems to be a rather rare shell. Will likely be found to be more common when dredged.

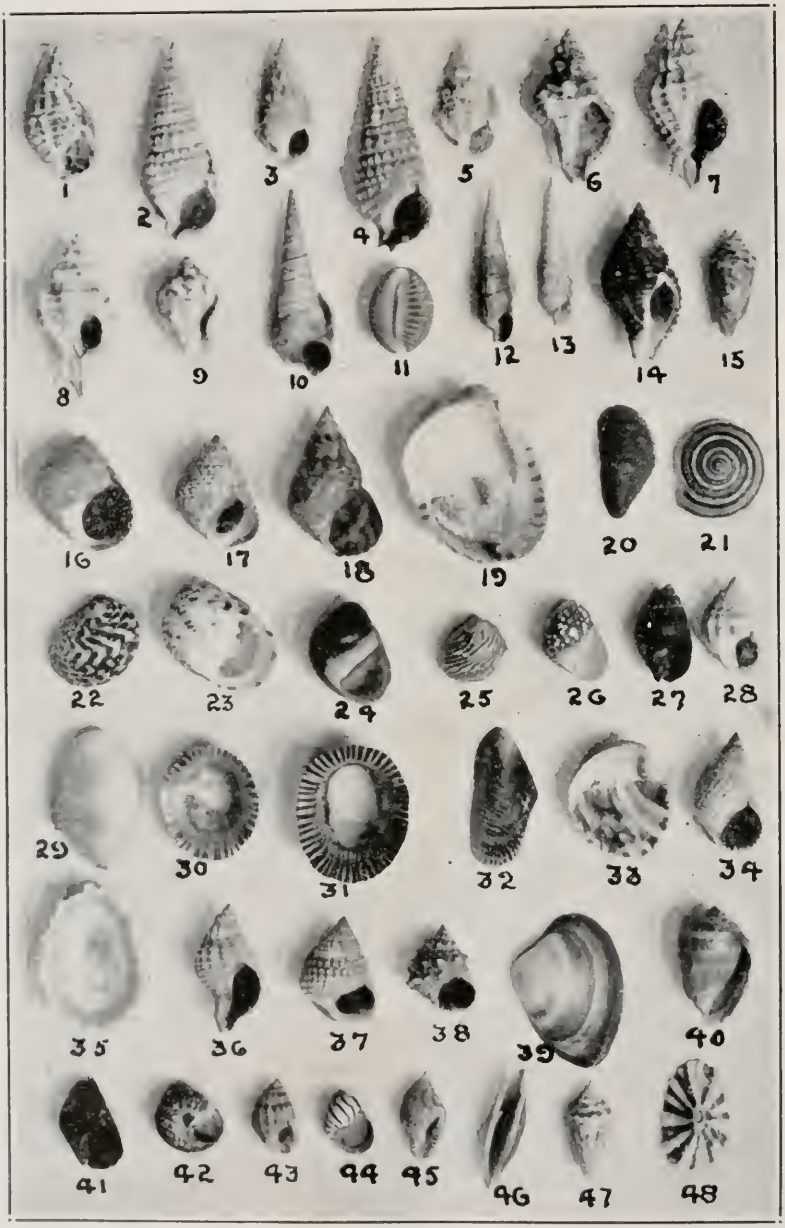


PLATE 8

1. **Cerithium litteratum,** Born. Lettered Horn Shell. South Florida. A small, fat, black and white shell, quite common in southern section. 3 for 25c

2. **Cerithium atratum,** Born. Nodulated Horn Shell. Florida Keys. A robust shell completely covered with nodules. 2 for 25c

3. **Cerithium muscarium,** Say. Dotted Horn Shell. West Coast of Florida. This little fellow is very common and often covered with spiny tubercles and considerable color. 6 for 25c

4. **Cerithium floridanum,** Morch. Florida Horn Shell. Florida. A very good sized, typical species, common to the Florida Coast 3 for 25c

5. **Cerithium algicola,** C. B. Ads. White Horn Shell. South Florida to West Indies. A very distinct little species, when once known, will always be easy to recognize. 3 for 25c

6. **Muricidea multangula,** Phil. Ridged False Murex. Gulf of Mexico. Fairly common in shallow bays and sandy bars. 1 to 95 fathoms. 2 for 25c

7. **Urosalpinx tampaensis,** Con. Florida Drill Shell. Florida. This is one of the little fellows who is happy drilling a round hole in bivalves. 4 for 25c

8. **Tritonalia cellulosa,** Con. Little False Murex. Gulf of Mexico. 1 to 14 fathoms. Common in shallow bays. 2 for 25c

9. **Columbella mercatoria,** L. Mottled Dove Shell. West Indies and Gulf of Mexico. A handsome and variable species that is common over its entire range. 4 for 25c

10. **Vermicularia spirata,** Phil. (Coiled) Massachusetts. These small tightly coiled forms are common over its range and resemble very closely certain species of Turritella. 25c

11. **Trivea pediculus,** L. Nut Cowry. Florida. There are many species of this genus in the West India region and they are all very handsome little shells. They are real little ribbed Cypraea. 3 for 25c

12. **Terebra protexta,** Con. Little Auger Shell. Florida, 2 to 50 fathoms. The Auger shells range from very small to over 8 inches in tropical regions. Nearly all are shiny handsome specimens. 4 for 25c

13. **Terebra concava venosa,** Dall. The White Auger Shell. Florida. 2 to 30 fathoms. Quite similar to preceding species and ranges over same territory. 4 for 25c

14. **Cantharus cancellaria,** Con. The Red Cantharus. Florida. A very attractive, small shell completely covered with ridges as are most of the species of the genus. 50c

15. **Conus pealii,** Green. Peal's Cone. Gulf of Mexico. A very small mottled shell of size of cut. 2 for 25c

16. **Littorina littorea,** L. Periwinkle or Common Winkle. Labrador to New Jersey. All the rocky coasts up New England way, are apt to be well covered with this prolific species. 4 for 25c

17. **Littorina irrorata,** Say. Spotted Winkle. Mass. to Gulf of Mexico. Very common on the grasses and bushes in shallow water bays where it seems to be happy in the sun between tides. 6 for 25c

18. **Littorina anguifera,** Lam. Angular Winkle. Florida. A noble species of the genus and with similar habits to the preceding variety 4 for 25c

19. **Crepidula fornicata,** L. Canoe or Slipper Shell. Prince Edward Island to Texas. Very common, assuming many different shapes, in the various localities where found. 3 for 25c

20. **Mytilus exustus,** L. The Little Brown Mussel. N.C. to Florida. A small brown species, fairly common in shallow bays. 2 for 25c

21. **Architectonica granulata,** Lam. Florida Staircase Shell. N.C. to Gulf of Mexico. The umbilicus is open to the spire which gives it its name. 2" 1.00

22. **Nerita tessellata,** Gmel. Black and white Nerita. Baby-tooth. Jupiter Inlet, Florida. Mostly black. 4 for 25c

23. **Nerita versicolor,** Gmel. Pink-colored Nerita. St. Augustine, Florida. The colored markings will distinguish this form from other southern species. 4 for 25c

24. **Neritina reclivata,** Say. Marsh Neritina. Florida to Louisiana. Very common in marshy bays and similar localities. Often of olive-green color. 6 for 25c

25. **Neritina picta,** Sow. White-striped Neritina. East and west coast. Small, yellowish, shells with diagonal stripes of white. Not common. 6 for 25c

26. **Neritina virginea,** L. Spotted Neritina, Florida to West Indies. Very common over most of its range and presents an infinite number of color patterns. 12 for 25c

27. **Nassa obsoleta,** Say. The Black Dog-Whelk. Gulf of St. Lawrence to Florida. Very common in the rocks everywhere along its range. 6 for 25c

28. **Nassa vibex,** Say. Mottled Dog-Whelk. Massachusetts to Gulf of Mexico. Most Nassa's are very variable and this species, from different beaches will show many patterns. 12 for 25c

29. **Tellina lineata,** Turt (braziliana) Little Red Telline. Florida to Brazil. A thin neat little species, typical of many others of the genus. 25c

30. **Siphonaria alternata brunnea,** Hanley. False Limpet. Florida Keys. The shells of this genus are like small Limpets but they have a bulge on one side or the other that usually distinguishes them 2 for 25c

31. **Siphonaria lineolata,** Orb. (naufragum). Dark False Limpet. Florida to Texas. The interior of the shell is beautifully lined. 2 for 25c

32. **Mytilus perna,** Dall. Striped Mussel. Key West. A fine, small shell of 1 inch, yellowish with dark radiating stripes. Thin. 20c

33. **Crepidua aculeata,** Gmel. Prickly Slipper Shell. N. C. to Texas. A very common species and when well cleaned an attractive variety. 3 for 25c

34. **Littorina zigzag,** Gmel. Zebra Periwinkle, Florida Keys. Very common on the rocks in southern part of state. 4 for 25c

35. **Fissurella barbadensis,** Gme. Common Keyhole Limpet. Florida. Interior of shell is greenish and exterior covered with nodules. 2 for 25c

36. **Urosalpinx cinereus,** Say. Common Drill Shell. Prince Edward Island to Florida. This little fellow is more common in New England than in the south. It is very destructive to young oysters. 3 for 25c

37. **Tectarias muricatus,** L. Nobby Tectarias. South Florida. Very common in some parts of its range. 4 for 25c

38. **Echinella nodulosa,** Gmel. Spiny Tectarias. N. C. to West Indies. A species of similar habits to the preceding. 4 for 25c

39. **Cyrena floridana,** Con. Little Purple Clam. Tampa Bay to Texas. A very common little bivalve which will usually be seen on every visit to the beaches. 3 for 25c

40. **Melampus coffeus,,** L. Coffee Shell. Cedar Keys to West Indies. This little brown fellow is common. 6 for 25c

41. **Planaxis nucleus,** L. Black Planaxis. Florida Keys. A little black shell representing a genus that is world-wide in distribution. 4 for 25c

42. **Tegula fasciatus,** Born. Calico Topshell. Florida Keys. A neatly polished small shell covered with white dots. 3 for 25c

43. **Nassa ambigua,** Mttg. Channelled Dog-Whelk. N. C. to Florida. Lives from 1 to 190 fathoms. Very common along certain sandy shores. 3 for 25c

44. **Neritina pupa,** L. Striped Neritina. Charlotte Harbor to the Florida Keys. A very striking small shell which always attracts attention. 6 for 25c

45. **Columbella rusticoides,** Heilprin. Spotted Dove-shell. Cedar Keys, Florida. A neat litt e shell which is fairly common in many localities. 6 for 25c

46. **Simnia uniplicata,** Sow. Purple Poached Egg. N. C. to the West Indies, living on Leptogorgia varying in color according to the Georgonia on which it lives. They are usually of a purple or yellow color. 2 for 25c

47. **Conus verrucosus stricticus,** Ads. South Florida. A variety of the common little Pebbly Cone. 2 for 25c

48. **Fissurella edititia,** Rve. Striped Keyhole Limpet. Florida. Usually about 1 inch with stripes as per cut. 25c

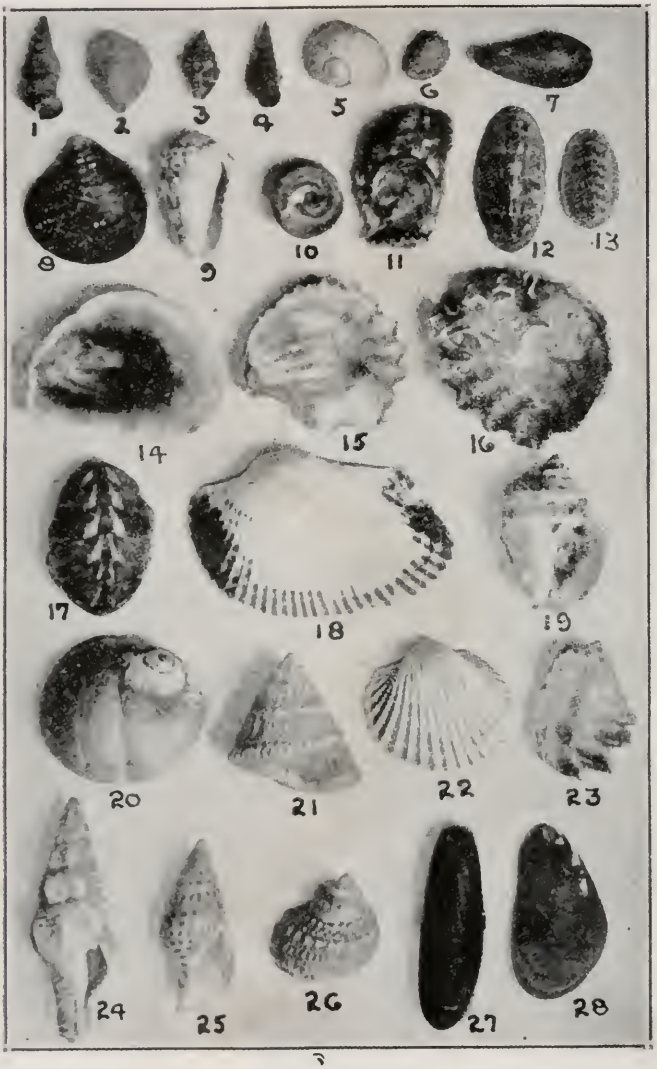


PLATE 9

1. **Cerithidea scalariformis,** Say. Spiny Horn Shell. Georgia to Florida, and West Indies. A very common little species often found in great quantities along the beaches. 1". 6 for 25c

2. **Terebratalia caput-serpentis,** L. A small brachiapod illustrated on another page. It lives in the north country, from Maine to Labrador. 50c

3. **Engina turbinella,** Kien. Nobby Engina. Key West, Florida, to West Indies. All of the species of this genus are brilliant shells, usually nobby or spiny. They are found in all oceans. 20c

4. **Cerithium minima nigrescens,** Mke. Black Horn Shell, Tampa Bay to Florida Keys and West Indies. This little black fellow sometimes comes on the beaches in such quantities that they appear like extensive black patches on the clear white sand. 6 for 25c

5. **Janthina globosa,** Swain. Globe Purple Snail. Gulf Stream of Florida and West Indies. Pelagic. 20c

6. **Nucula proxima,** Say. L. Common Nut Shell. New Jersey to Florida and Texas. There are many similar species, mostly from deep water. 20c

7. **Nuculana acuta,** Con. Pointed Nuculana. Massachusetts to Florida and West Indies. There are many other species, most all from deep water. 25c

8. **Astarte castanea,** Say. Brown Astarte. Nova Scotia to North Carolina. 5 to 6 fathoms. A fine species covered with thick brown periostracum and typical of many other varieties from cold water. 25c

9. **Morum oniscus,** L. Wood Louse. Florida Keys and West Indies. Only the one species in this territory. 35c

10. **Tegula excavata,** Lam. Green Top Shell. Florida Keys and West Indies. There are four species in this territory. 25c

11. **Pedalion bicolor,** C. B. Ads. Little Purse Shell. A small oyster-like shell of 1", brownish-black inside. 50c

12. **Lepidochiton marmorea,** Fabr. Painted Chiton. Greenland to Massachusetts. 1 to 50 fathoms. Circumboreal. A handsome small species. 50c

13. **Chaetopleura apiculata,** Say. The Little Chiton. Massachusetts to Florida. 3 to 12 fathoms. A neat little species. 25c

14. **Pododesmus decipiens,** Phil. Black Oyster. Florida to West Indies. This species is an Anomia and the valves are often found on the beaches. 50c

15. **Ostrea cristata,** Born. Saw-edge Oyster. South Florida and West Indies. It is easy to recognize this little oyster by its saw-tooth edge. 50c

16. **Ostrea foliata,** Lam. Foliated Oyster. An irregular dark colored shell of 1½", living at St. Petersburg Beach to Florida Keys. 50c

17. **Chiton squamosus,** L. Common Chiton. Florida Keys and West Indies. This species is the largest and most common found on southeast coast. 2" 25c

18. **Arca secticostata,** Rve. White Ark. North Carolina to Florida and Texas. A fine large species which is common in various localities. 3" 50c

19. **Thais deltoidea,** Lam. The Banded Thais. South Florida to West Indies. It has two rows of prominent knobs, usually white, which are bordered with brown bands. 1½" 30c

20. **Polinices heros,** Say. Circular Bullseye. Gulf of St. Lawrence to North Carolina. 1 to 238 fathoms. Nearly round and common to all the New England coast. 2½" 25c

21. **Astraea americana,** Gmel. American Turbine Shell. Florida Keys and West Indies. A conical white shell with many fine ridges, the white operculum usually found tightly fitting the aperature. 1" 25c

22. **Arca incongrua,** Say. Little White Ark. North Carolina to Texas. One of the smaller Arks and fairly common over the entire territory. 35c

23. **Ostrea frons,** L. Coon Oyster. South Florida and West Indies. Very common in this section, where it attaches itself to the mangrove roots which line the shores of the coast and many islands. 50c

24. **Latirus infundibulum,** Gmel. Ridged Latirus. Florida Keys and West Indies. A brown spindle-shaped shell, with prominent ridges and smaller circular ridges. 2" 50c

25. **Pisania pusio,** L. Pisa Shell. Florida Keys and West Indies. A neat, mottled, polished species, of a brownish-purple color, with white spots and bands. There is one other species of the genus in this territory. 2" 50c

26. **Turbo castaneus crenulatus,** Gmel. Nobby Top Shell. A variety of the true castaneus, fairly common on sandy beaches. North Carolina to West Indies in 2 to 15 fathoms. 1¼" 25c

27. **Lithophaga nigra,** Orb (caribaea). Black Rock-borer. South Carolina to Brazil. One of the common borers, usually found in wood, coral or rock. 1½" 50c

28. **Modiolus demissus,** Dill. Little Black Mussel. Virginia to Florida. A very dark, neat species of mussel, common to this section. 1¼" 25c

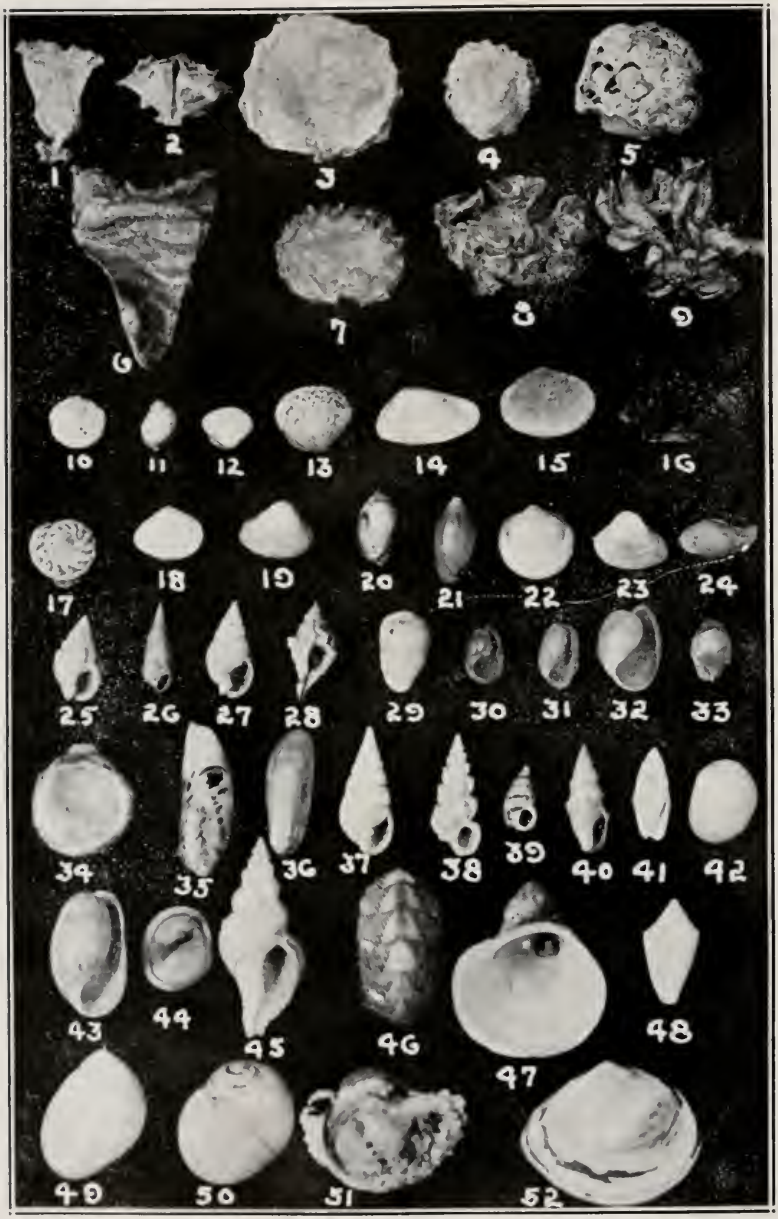


PLATE 10

1. **Egg capsule Fasciolaria Tulipa,** tall and slender, size of cut scalloped edges. Comes in clusters 2 to 3 inches across.

2. **Egg capsule Fasciolaria distans,** size of cut, scalloped edges, come in round clusters. 2 inches.

3. **Egg capsule (Fulgar) perversa,** square on top edge, with outer segments raised about 1-16th inch. Strings 2 to 4 feet.

4. **Egg capsule (Fulgar) pyrum,** smaller than perversa, strings 1 to 2 feet.

5. **Egg capsules Murex pomum.** Usual masses 2 to 3 inches diameter, but some times they are large, laid by many individuals.

6. **Egg capsule Fasciolaria gigantea.** Are translucent, with five reddish bands.

7. **Egg capsule (Fulgar) canaliculata.** Come in strings 2 to 3 feet.

8. A cluster of eggs of Fasciolaria distans mentioned above.

9. **Eggs Murex festivus,** Hinds. California. Like small, flat, pink seeds, pointed at each end.

10. **Lucina nassula,** Con. Little Lucine. N. C. to Mobile, Ala. 7 to 200 fathoms. A small white species, often found very common on West Coast, Florida. 3 for 25c.

11. **Natica pusilla,** Say. Baby Bullseye, Maine to Gulf of Mexico, 2 to 10 fathoms. Very small species, not common. 2 for 25c

12. **Transenella conradina,** Dall. Rose Petal. West Florida to Keys and Palm Beach. A small white species. 4 for 25c

13. **Antigona simpsoni,** Dall. Simpson's Antigona. West Florida. Small mottled form, fairly common. 3 for 25c

14. **Donax variabilis,** Say. Coquina, North Carolina to Florida and Texas. Burrows in sand as tide goes out. Many color patterns. 10 for 25c

15. **Semele bella-striata,** Con. (cancelata) Purple Semele. N. C. to Gulf. Very common on all beaches where valves can often be shoveled up by the bushel. 3 for 25c

16. **Eggs Ranella affine cubanianum,** Orb. North Carolina to Florida. Often laid on bivalve shells. Very small ¼", pink.

17. **Modulus floridana,** Con. Nobby Button. N. C. to Gulf. There are three species of this genus in this territory, all much alike. 6 for 25c

18. **Tellina sayi,** Dall. (polita) Say's Telline. Tampa Bay. A neat little white shell of ½ inch, white is quite common. 2 for 25c

19. **Mulinia lateralis,** Say. Triangular Clam. New Brunswick to Texas and West Indies. A small, whitish, triangular form, often found very common on the beaches. 4 for 25c

20. **Melampus lineatus,** Say. (bidentatus) Striped Coffee Shell. Prince Edward Island to Gulf of Mexico. A small, light brownish shell, which is found in brackish salt water marshes. 6 for 25c

21. **Auriculastrum pellucens,** Mke. Clear Ear Shell. Cedar Keys. Only two species in this territory both much alike 4 for 25c

22. **Divaricella dentata,** Wood. Dentate Divaricella. N. C. to Florida. 10 to 60 fathoms. A very handsome small white species, not common. 25c

23. **Mulinia latealis corbuloides,** Desh. Beaufort, North Carolina to Texas. A small white species like No. 19. 4 for 25c

24. **Lyonsia floridana,** Con. Florida Lyons Shell. West Coast Florida to Texas and West Indies. A thin fragile species, often thrown up on the beaches in quantity. 25c

25. **Nassa consensa,** Rev. Angular Dog-Whelk. N. C. to Gulf of Mexico. Dredged at 50 to 100 fathoms, but occasionally found on the beaches. 4 for 25c

26. **Pyramidella crenulata,** Holmes. Obelisk Shell. A small tan-colored species about ¾ inch, fairly common on both east, and west coasts. 2 for 25c

27. **Nassa trivitata,** Say. Lined Dog-Whelk. Mass. to Florida. Lives in the sand between tides. 6 for 25c

28. **Eupleura caudata,** Say. Three-ridge Murex. Mass. to Florida. 1 to 8 fathoms. Very common in the many island bays of Florida, living on sandy bottom. 3 for 25c

29. **Marginella apicina,** Mke. North Carolina to Gulf of Mexico and West Indies. The Gem Shell is highly polished. There are some 65 species of the genus on the East Coast but more than half are from deep water. 6 for 25c

30. **Haminoea succinea,** Con. Frail Bubble Shell. Indian River and West coast of Florida to Texas. Thin, with wide aperture at base. 2 for 25c

31. **Haminoea solitaria,** Say. Mass. to Georgia. About same size as No. 30, but more slender aperture. 2 for 25c

32. **Haminoea elegans,** Gray. (guildingi) Florida to Texas. A large round species. All three are very thin, highly polished and translucent. 2 for 25c

33. **Cavolina telemus,** L. (tridentata) Eastern Carolina. Pelagic. Often washed on beaches during storms. 2 for 25c

34. **Hipponyx antiquata,** L. Florida Keys and West Indies. The Little Cap Shell is one of three forms living in this territory. Usually found attached to other shells. 2 for 25c

35. **Lithophaga bisulcatum,** Orb. Brown Rock-eating Mussel. Florida and West Indies. Bores in wood or rock making an even round hole, highly polished. 30c

36. **Modiola arborescens,** Dill. (papyria) Paper Mussel. Florida to Texas. A very thin light greenish shell often found living buried in the sand. 25c

37. **Pyramidella dolobrata,** L. White Obelisk Shell. South Florida. A highly polished white shell with narrow russet band. 25c

38. **Epitomium angulatum,** Say. Angular Wentletrap. Conn. to Texas. A neat white species of one inch. Over 55 species on the East Coast. 25c

39. **Epitomium lineatum,** Say. Banded Wentletrap. Mass. to Gulf. A small form about ½ inch with russet band near periphery. 25c

40. **Clathrodrillia leucoyma,** Dall. White Turris. Florida Keys and Gulf of Mexico. 3 to 5 fathoms. Often found on beaches in quantity after storms. 3 for 25c

41. **Olivella nivea,** Gmel. Rice Shell. Florida Keys and West Indies. Small, white, polished species with faint trace of banding. 6 for 25c

42. **Littorina obtusata.** L. (palliata) Dwarf Winkle. Labrador to New Jersey. A small, round, smooth, yellow or reddish species. 6 for 25c

43. **Bulla occidentalis,** C.B. Ads. Florida to Texas and West Indies. A mottled Bubble Shell, about ½ by 1 inch. 6 for 25c

44. **Turbo castaneus,** Gmel. operculum. These doors perfectly fit the aperture, the highly polished, oval, greenish surface being on the outside. 30c

45. **Trophon craticulata,** Fabr. Little Spindle Shell. Hudsons Strait to New Foundland Banks, 30 to 60 fathoms. These and other deep water forms are often found in perfect condition in stomach of fishes. 1¼" 1.00

46. **Lepidochiton marmorea,** Fabr. Painted Chiton. Greenland to Massachusetts. 1 to 50 fathoms. Circumboreal. Shell about 7/10th of an inch, reddish and white markings. 50c

47. **Capulus hungaricus,** L. Greenland to Florida. 1 to 458 fathoms. The Great Cap is usually found living on back of another shell. 1¼" 50c

48. **Conus verrucosus,** Hwass. Little White Cone. Florida Keys and West Indies. Small ½ inch white, and covered with circular rows of tubercles. 2 for 25c

49. **Polinices lactea,** Guild. Ivory Bullseye, Florida Keys, Texas and West Indies. A white polished form, 1 inch. much like other East India species. 25c

50. **Natica maroceana, Dill.** Little Cat's eye. N. C. to Florida. A round horn-colorded shell often eroded to white. 25c

51. **Chama congregata,** Con. North Carolina to West Indies. Left-handed Chama. Opens the reverse of other similar forms. Lives attached to rocks or coral. 1¼" 35c

52. **Macoma balthica,** L. (fusca) Fragile Clam. Arctic Ocean south in deep water to Georgia. It is often found in quantity on beaches of New England. 1 inch. 2 for 25c

PLATE 10A

1. **Lucapina adspersa,** Phil. Key West, Florida. A rather elongated flat shell, finely lined. 1" 50c

2. **Fissurella listeri,** Orb. Florida Keys. The shell is white, with fine radiating ribs, crossed by circular lines. 1" 50c

3. **Fissurella alternata,** Say. New Jersey to Florida. It is rather tall and narrow with similar crossed lines. 1" 25c

4. **Fissurella nodosa,** Born. Florida Keys. The radiating ribs are covered with nodules and smaller ribs between. 1" 25c

5. **Spirula spirula,** L. A pure white shell that in life is within the mollusk. It can be found on practically every tropical ocean beach in the world but you almost never find the mollusk with it. 1" 25c

6. **Cypraea spurca,** L. Gulf of Mexico. A yellowish small shell with small white spots and white below. 1" 50c

7. **Cypraea cinerea,** Gmel. N. C. to Florida but most specimens in collections come from Bahamas, where it is more common. A shell of gray color, with two faint white bands, and black shading around the lower part of the shell. 1 to 1¼" 50c

8. **Leucozonia ocellata,** Gmel. Gulf of Mexico. A smooth, light brownish shell with white spots 1" 30c

9. **Crepidula plana,** Say. Maine to Florida. The Slipper Shell. Dull white above and glistening white below, exactly the shape of a slipper without the heel. 1" 25c

10. **Ishnochiton floridanus,** Pils. Key West, Florida. A thin, narrow grayish shell with faint russet markings. 1" 50c

11. **Neritina punctulata,** Lam. Florida Keys. Of a light greenish color, it is covered with white diagonal stripes. 6 for 25c

12. **Neritina reclivata,** Say. All Florida coast and usually found very common in salt water marsh land. All the Neritinas of the world live in marshy territory, and often extend back in the rivers for miles, even where the water is only slightly saline. 6 for 25c

13. **Terebra concava vinosa,** Dall. North Carolina to Florida. A very slender, grayish shell. There are many similar small forms throughout the world which are often brilliantly polished. 1" 25c

14. **Terebra hastata,** Gmel. Florida Keys. A light russet shell, marked with white and numerous perpendicular lines. 1" 25c

15. **Bulla amygdala,** Lister. Florida Keys. A medium sized shell faintly mottled with brown. 1" 25c

16. **Janthina exigua,** Lam. Gulf Stream, Florida. A round globose form of rich purple color. It is Pelagic as are all of the species throughout the world. ¼" 25c

17. **Lucapina cancellata,** Sow. Florida Keys. A small shell, finely rayed with green, very small hole in top. ¾" 25c

18. **Calliostoma jujubum perspectivum,** Phil. Georgia to Florida. A sharply conical shell finely marked with light brown and white. ¼" 30c

19. **Urosalpinx mexicana,** Rve. Gulf of Mexico. A small white shell with numerous tall ridges and finely radiating small lines. 30c

PLATE 11

1. **Murex salleanus,** A. Ads. Gulf of Mexico. This fine white shell is usually classified as a variety of rufus, Lam., also found in the Gulf. They gradually merge together. I have called this the Pink-tip Lace Murex. 1½" 50c 2½" 1.00

2. **Distorsio clathrata,** Lam. Florida Keys. There are only about 8 species in the genus ranging from Florida to Hong Kong. This species is white with the peculiar aperture shown in cut. 2¼" 1.50

3. **Leucozonia cingulifera,** Lam. Florida Keys. A shell that has numerous knobs in regular rows and of a reddish-brown color. 1½" 50c

4. **Melongena corona belknapi,** Petit. Venice, Florida. A rather attractive small form of this very common shell. There are about eight forms of this shell that have been named from Florida Keys to Brownsville, Texas. 1½" 50c

5. **Strombus bituberculatus,** L. Kid Conch. Jupiter Inlet. Florida to West Indies. Ranges from whitish to pink in color, with broad thick lip. 2 to 3" 50c

6. **Buccinum undatum,** L. North Atlantic and circumboreal. There are many forms of this Common Whelk depending on the depth of water. Has been found in New Jersey, but very common in far North. The illustration is of a very thin specimen dredged from deep water. 2 to 3" 50c

7. **Cantharus tinctus,** Con. N. C. to Florida. This shell has often been labeled as Trintonidea but it is a true Cantharus, as can readily be seen when you place it with the more than 100 other forms from all over the world. The entire genus are attractive shells. This form is light brownish and finely ridged. 25c

8. **Sinum perspectivum,** Say. N. J. to Florida. A thin, pure white shell. There are three species on East Coast and about 60 throughout the world. While the shell is only 1½", the mollusk to which it is attached I have seen stretch out to 6" or more and about as wide. They love to burrow in the shallow sand of the sea and are easily collected when you learn how to find them. 1½" 25c

9. **Crepidula glauca,** Say. Canada to Texas. The shell is white with brownish marks which are usually covered with a thin periostracum, but the markings show through the shell. Very common over a wide range. 1¼" 3 for 25c

10. **Triton aquatalis,** Rve. Florida Keys. An attractive brownish shell with ridges and white bands. 2" 1.00

11. **Cancellaria reticulata,** L. Gulf of Mexico. The shell is finely adorned with perpendicular ridges, and bands of white and brown. A pure white race was found some time ago. 1½" 25c

12. **Strombus pugilis,** Young. Gulf of Mexico. Collectors often find this shell and seldom know what they have, so I illustrate it. The lip is always thin showing it is immature. 2" 25c

13. **Phos candei,** Orb. N. C. to Florida, down to 180 fathoms. A finely ridged white shell with faint traces of orange. 1" 1.00

14. **Colus pygmaeus,** Gould. Swampscott, Mass. A pure white small edition of the other Colus found in northern waters. 1" 50c

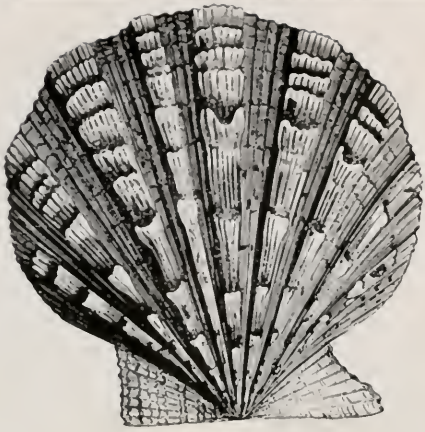
15. **Cerithium ebeneus,** Brug. Florida Keys. A fine reticulated small shell with faint markings of brown. Fairly common. 4 for 25c

16. **Terebra dislocatus,** Say. Florida Keys. A tall slender shell of brownish color with fine ridges and a band at top of each whorl. 1½ to 2" 3 for 25c

17. **Natica clausa,** B&S. Grand Menan, Maine. A small round yellowish-white shell, usually found in Northern waters. 25c

18. **Calliostoma radicula,** Simp. Woods Hole, Mass. A small tightly coiled shell rayed with faint reddish-brown markings. 1" 25c

19. **Vermetus radicula,** Stimp. Woods Hole, Mass. A small tightly coiled and usually irregular shell of 1½". 25c



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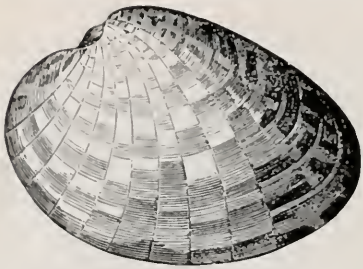

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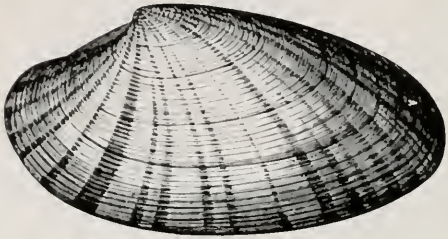

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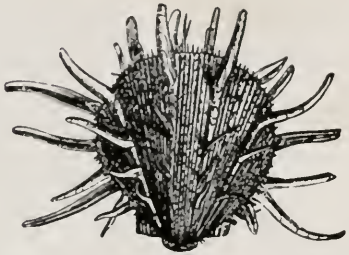

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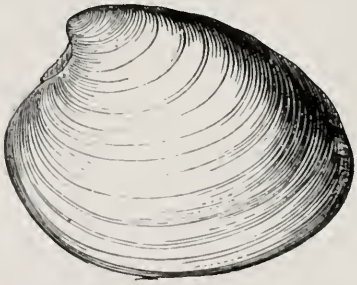

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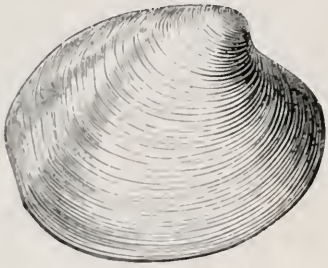

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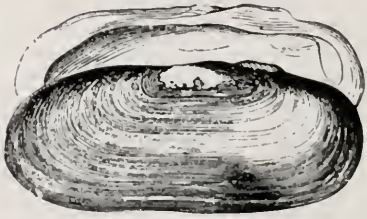

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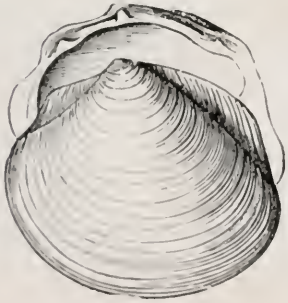

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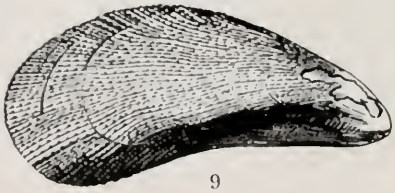

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PLATE 12

1. **Pecten nodosus,** L. Lions paw. N. C. to Gulf of Mexico. A splendid shell, one of the finest in the world of its class, but seldom found on beaches. Usually dredged at 10 to 20 fathoms. Typical color is a shade of purple which ranges thru to orange-cream and bright red. The unusual colors are all rare and expensive.
2" 1.50 3" 2.00 4" 3.00

2. **Macrocallista maculata,** L. Calico Shell. N. C. to Gulf of Mexico. Finely mottled with irregular blotches of brown and gray. Very thin periostracum. 75c

3. **Macrocallista gigantea,** Gmel. Sun-Ray Sheel. N. C. to Gulf of Mexico. The largest of the genus on the East Coast attaining 5". In shallow bays they are often quite common. The shell is finely rayed with brown on a lighter brown glistening surface. Interior pinkish-white. 50c to 1.00

4. **Spondylus americana,** Lam. Eastern Thorny Oyster. N. C. to Texas. This shell is fairly common in the Gulf at 10 to 20 fathoms but rarely found on any beach. Older specimens attain as much as 8", but the small 2½ to 3" specimens are finest, often with slender spines where the old fellows have only short stubby spines. One of the grand forms of Spondylus of the world. 7.50 to 25.00

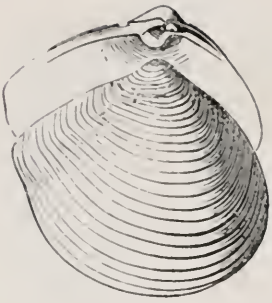
5. **Cyprina islandica,** L. Greenland Venus. Greenland to N. C. in deep water. Most specimens I have seen come from Newfoundland. There is only one species, which is uncolored and attains 3 to 4".
1.00

6. **Venus mercenaria,** L. Quahog, Little Neck Clam. Gulf of St. Lawrence to Florida. Along the Mass. coast it is a regular article of commerce. Small one-year clams are Little Necks. There is a 2" form found along N. C. and Florida called **notata,** Say. A white variety is called **alba,** Dall. **Campeachensis,** Gmel. is a very large heavy 5" shell often seen alive for sale in Florida food stores. **Alboradiata,** Sow. is from Gulf of St. Lawrence. **Campeachensis,** Palmed. was described in 1927. **Texana,** Dall. is from Texas. You You may find several of these varieties in the same territory. All are true Venus Shells of the East Coast and belong to this complex. Mostly 2".
All varieties 50c each.

7. **Cyrtodora siliqua,** Lam. Newfoundland. A northern species which is not well known and not often seen in collections. It is uncolored and 2 to 3". 75c

8. **Loripinus chrysostoma,** Phil. (edentula) Butter-cup Shell. Florida to West Indies. As round as a cup, the odd valves being very common on Florida beaches as the shell hinge is very slight. The interior of the shell is tinged with yellow. Much used in manufacturing shell novelties the valves being very common, but the entire shell in perfect pairs is very much less common. 2 to 3" 1.00

9. **Modiolus plicatula,** Lam. Plicate Mussel. Prince Edward Island to Florida. A fine 3 to 4" species often found burrowing in banks. It is also firmly established now on the West Coast. Usually a dark, almost black color. 50c



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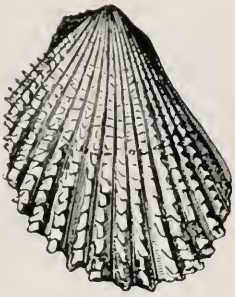

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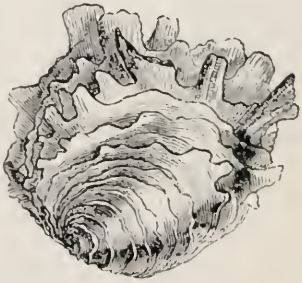

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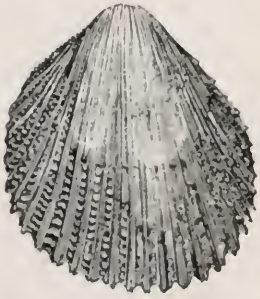

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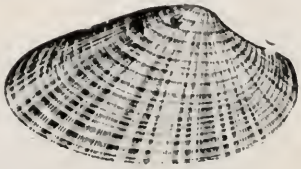

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PLATE 13

1. **Raeta canaliculata,** Say. Hat Shell. New Jersey to Brazil. A very thin, white and fairly common shell, but the hinges are so slight, most specimens found on the beaches are unmated valves. It is finely ridged. 2 to 3" 1.00

2. **Lima lima,** L. (Squamosa) Rough File Shell. The valves are covered with file-like notches. Shell is pure white and builds a nest in which it lives, on the bottom of the sea or crevices in the coral, where the nest will be well protected. I have had sent me exactly similar forms from China Seas. 2¼" 75c

3. **Lima inflata,** L. Inflated File Shell. N. C. to W. I. Not common, in fact most of the File Shells are rather uncommon. I have had this species sent me also from Malta in Medit. Sea. 2" 75c

4. **Lima scabra,** Born. Flat File Shell. A pure white species found from N. C. to W. I. but never common anywhere. The two valves of the shells of this genus never meet and fit like other bivalves. 2 to 3½" 75c

5. **Codakia orbiculata,** Mont. Great White Lucine. North Carolina to West Indies. An attractive large white 3" shell ornamented with concentric ridges crossed with numerous parallel lines. One of the finest of this genus in Western Hemisphere. 50c

6. **Lucina jamaicensis,** Lam. Yellow Lucine. Florida to West Indies. The shell is nearly round, outer surface rough, with circular lines. Inside yellowish. 2 to 3" 50c

7. **Lucina pennsylvanica,** L. Pennsylvania Lucine. N. C. to Florida and W. I. Usually 1½", white, thick, and can always be easily recognized by the indentures along the edge. 25c

8. **Pedalion alata,** Gmel. Purse Shell. Florida to W. I. A curious shell much resembling the Mother of Pearl from the East Indies. It is thin, brownish and, if ground down to the pearl, takes a high polish. There are 50 species scattered over the world. 2 to 3" 75c

9. **Chama macerophylla,** Gmel. Jewel Box. Florida to W. I. These attractive shells with their yellow or purple fronds are mostly from deep water, 10 to 20 fathoms. The sponge fishermen often bring them up with the sponges, but the shells are always attached to the reefs from which they can never more than open and shut the upper valve. 2 to 3" 2.50

10. **Cardium muricatum,** L. Common Cockle, N. C. to Florida and W. I. This species is very round and yellow inside. An attractive 2 to 3" shell. The other form quite similar in outline with the rich purple interior is Cardium isocardiam, L. and is called the China Cockle. 50c

11. **Cardium magnum,** Born. Great Heart or Cockle. Virginia to Florida and Mexico. The largest of the genus on the East Coast, of a brownish color they are often found at Sanibel and other beaches by the thousands. 3 to 5" 50c

12. **Tellina radiata,** L. Sunset Shell. S. C. to Texas and W. I. The Sun Shell, in highly colored specimens, show all the rays of the setting sun. They are naturally very smooth and shiney. There is a yellowish form, without rays, called **unimaculata,** Lam. and found over the same range. Most common in West Indies, where it is gathered by the barrel and shipped to be used in the manufacturing of novelties. 25c

PLATE 14

1. **Arca occidentalis,** Phil. (noae) Turkey-wing Shell. A light colored shell with prominent dark zigzag markings, the whole covered with mossy-like hair. Used to be called Noah's Ark. 3" 50c

2. **Yoldia limatula,** Say. The Greenish Yoldia, Gulf of St. Lawrence to N. Y. The shell is shiny greenish and of the form of cut. There are 28 species on the East coast mostly ½ to 1". Usually greenish or corneous color. Most all are from deep water and more or less rare in collections. Some have been found living at 2000 fathoms. They will illustrate a deep water shell. 50c

3. **Rangia (Gnathodon) cuneata,** Gray. Louisiana. A solid, heavy, light brownish shell of which only 2 species are known. This form is found living quite common in Lake Ponchetrain. 2" 50c

4. **Pinna serrata,** Sow. (seminuda) Fan Shell. N. C. to W. I. Most all shells of this genus are called Fan Shells. This species is rather thin and completely covered with fine serrations, all of a light yellowish color. The shells consist of two plates, as can be seen from the interior. They live in the mud, held firmly in place with a silky brissus, the strands of which are ten times finer than silk. A reddish species is called **carnea,** and a nobby species **regida (muricata).** This form ranges from 6 to 12". 1.00 and Up

5. **Anomalocardia brasiliana,** Gmel. Striped Venus. N. C. to Brazil. A small white shell of the form of cut with fine ridges and zigzag markings. It is usually 1". 50c

6. **Nuculana concentrica,** Say. The Concentric Nuculana. Fla. to Texas. A neat little bivalve of 1". There are 20 species in the genus mostly from deep water. 50c

7. **Astarte castanea,** Say. Brown Astarte. Nova Scotia to Cape Hateras. A light brown, flat, rounded shell, that seems to stand any amount of cold water and few specimens range very far south. There are 40 known species in both shallow and deep water and most all from the Arctic regions.

8. **Arca inaequalis,** Dall. Unequal Ark. Fernandina, Florida down to 294 fathoms. A good size white species in which the valves are unequal. It is fairly common on some Florida shores. 2" 50c

9. **Strigilla carnaria,** L. N. C. to Brazil. A small reddish and white shell with very fine lines over the entire surface. 1" 25c

10. **Divaricella dentata,** Wood. The Dentate Divaricella. N. C. to W. I. in 10 to 60 fathoms. It is pure white and finely sculptured. Only two forms on East Coast. 1" 50c

11. **Ensis directus,** Con. (Americana) Razor Clam. Gulf of St. Lawrence to Fla. This cut should show a slight curved shell, as the Ensis are about all curved and the true Solen's are straight like this cut. 4 to 5" 50c

12. **Pecten islandicus,** L. Iceland Scallop. Greenland to N. C. usually in deep water. When well cleaned they often show brilliant colors from yellow to pink and red, and I have had all colors on one shell. More common in Iceland and Norway where they are regularly fished for food. I have had very good specimens taken from stomach of codfish. 3 to 4" 1.00

13. **Asaphis deflorata,** L. (coccinea) Rayed Cockle. Fla. to W. I. It comes in various colors, purple being the most common. But yellows and reds are found and often two or more colors on one shell. Used in museum displays to show range of coloration. 2" 50c

14. **Iphigenia brasiliana,** Lam. Indian River, Florida to Brazil. A light brownish shell, shaped somewhat like a Donax. Very common over its range. 1 to 2" 50c

15. **Anomia aculeata,** Mull. Aladdin Lamp or Saddle Oyster. It is usually found living on the back of other shells and assumes the shape of its host. The inner valve is very thin. Of a horn color. 1¼" 30c

16. **Modiola modiolus,** L. Common Mussle. Artic Ocean to N. C. A dark shell of the form of cut with hairy periostracum. Often found growing in large masses, each shell held to other, with a strong brissus. 2" 50c

17. **Mytilus recurva,** Raf. (hamatus) Curved Mussel. R. I. to W. I. The shell is always arched, some more so than others. Of the usual dark color of most of the shells of this genus. 1¼" 25c

18. **Pteria colymbus,** Bolt. Wing shell. N. C. to W. I. Usually dark colored, slender and thin, they are often found attached to sea growths, a dozen or more on a single gorgonia. 1½ to 2" 1.00

19. **Modiola tulipa,** L. Black Mussel. N. C. to West Indies. A medium size, usually very smooth, black shell of 2" or more. In some beaches in New England vast beds, acres in extent, can be seen. 25c

20. **Lima tenera,** Sow. Little File Shell. Florida Keys. A thin white dainty 2" shell not common. 50c

21. **Saxicava arctica,** L. (rugosa) The Arctic Saxicave. Greenland to W. I. Also found on the West Coast, evidently having found its way over thru the Arctic Ocean. Ranges from 1 to 100 fathoms. They are borers and specimens collected are usually in a piece of wood 1" 50c

22. **Modiola opifex,** Say. The Slender Mussel. N. C. to W. I. Much resembles the other species of the genus, but more slender and hairy. 1½" 30c

23. **Arca pexata,** Say. The Bloody Ark. Mass. to N. C. A dark colored hairy shell common over its range. It has red blood, a rarity among mollusca. 2" 50c

24. **Astarte undata,** Gld. The Ribbed Astarte. Labrador to Maryland. It is covered with a brown periostracum and deeply ribbed. A cold water shell which has been found down to 500 fathoms. 1¼" 30c

25. **Mya arenaria,** L. Soft-shell Clam. Greenland to Fla. A shell that seems to be happy in either cold or warm water. Of a chalky white, irregular surface and open at one end. 2½" 50c

26. **Dosinia discus,** Rve. Fine-lined Artemis. Cape May to Fla. Keys. Only found on the East Coast and is white with fine concentric rings. When fresh it has a yellowish periostracum. On the West Coast of Florida you find the white Heavy-lined Artemis (Dosinia elegans, Con.) equally as common. 2 to 3" 50c

27. **Plicatula spondyloidea,** Meusch. Cats Paw. Florida to Texas. A small finely ridged shell often found attached to other shells. There is a similar shell called gibbosa. 1" 50c

28. **Chione paphia,** L. The Elegant Venus. Florida Keys to West Indies. It has very thick heavy ridges and a brilliant natural polish with some mottled color. 1½" 1.00

PLATE 15

1. **Chama macerophylla,** Gmel. Jewel Box. Gulf of Mexico from deep water, usually 10 to 20 fathoms. It varies from a rich yellow to pink. 2 to 3" 2.50

2. **Murex rufus florifer,** Yellow Rock Shell. Gulf of Mexico. Is allied to the Black Lace Murex, of a yellowish color, the fronds edged with brown. Scarce. 2½" 1.00

3. **Spondylus gussoni,** Da Costa. Red Spiney Oyster. Gulf of Mexico. Deep sea only. Of bright red color, few spines. 2½" 2.50 to 5.00

4. **Pecten raveneli,** Dall. Brown Vola. Gulf of Mexico. From deep sea only. A rare shell only recently offered to collectors. Brownish mottled color. 2" 1.00

5. **Spondylus americana,** Lam. Eastern Thorny Oyster. Gulf of Mexico. From deep sea only. Pure white with fairly long spines when young. Base is red. 4 to 7" 7.50 to 25.00

6 and 7. Are valves of **Pecten exasperatus,** Sow. muscosus. The Sponge Scallop from deep water in Gulf of Mexico. Finest specimens are brought up by the sponge divers. Specimens found on beaches are usually free of the sponge. It is a reddish color. About 2". 1.00

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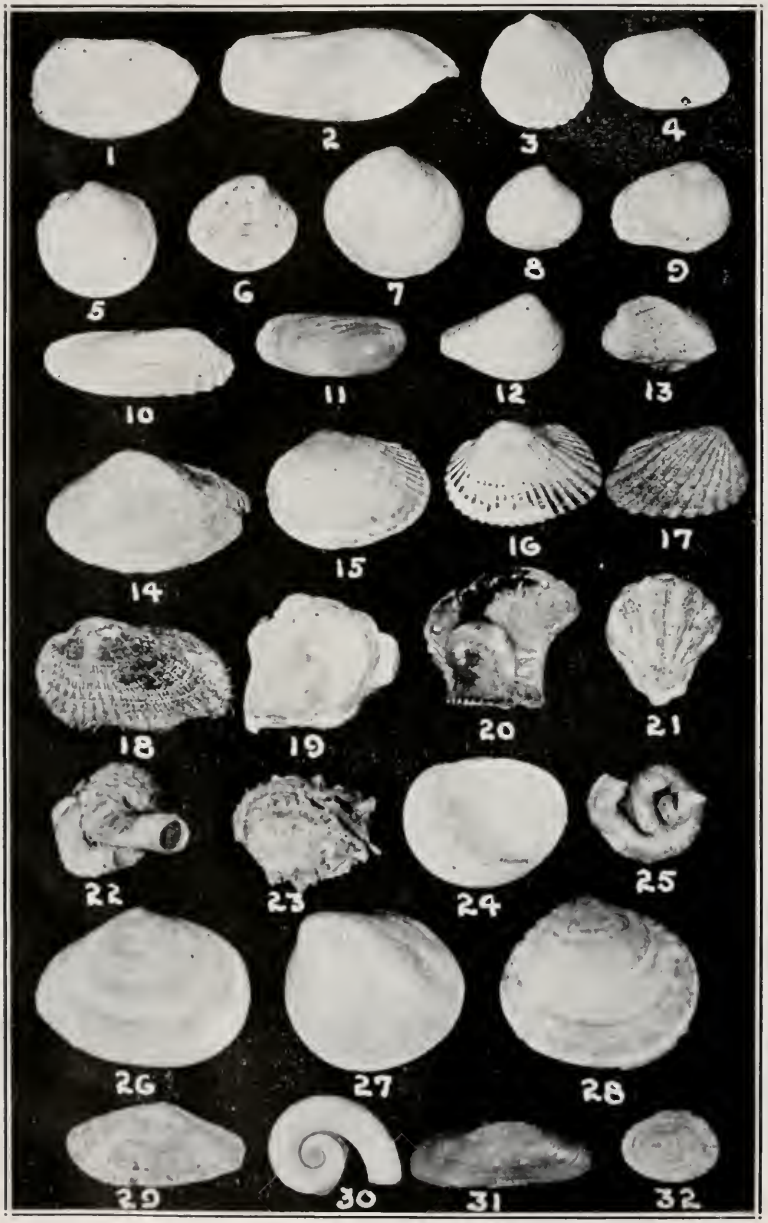
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PLATE 16

1. **Crepidula plana,** Say. White Slipper Shell. Prince Edward Island to Texas. Fairly common in some localities. 1¼" 25c

2. **Barnea truncata,** Say. White Piddock. Maine to Gulf of Mexico. A fine species, fond of burrowing in the sand. Very fragile. Valves only meet in the middle. 2" 1.00

3. **Glycymerus pectinata,** Gmel. Comb Shell. North Carolina to West Indies and Texas. Found 2 to 175 fathoms and often on the beaches after storms. 1" 50c

4. **Tellina aurora,** Hanley. St. Petersburg Beach, Fla. A small white shell only occasionally found. 1" 30c

5. **Divaricella quandrisulcata,** Orb. Massachusetts to Brazil, in 10 to 30 fathoms. A very round, finely sculptured white species. 1" 50c

6. **Chione interpurpurea,** Con. Little Mottled Venus, North Carolina to Texas. A small brown and white shell, fairly common on all of the beaches. 1" 25c

7. **Semele proficus,** Pult. (orbiculata) White Semele. Virginia to Gulf of Mexico and West Indies. Nearly white, very round and fairly common. 1½" 25c

8. **Cytherea hebraea,** Lam. West Coast and Florida Keys. A small white shell about ¾ inch and fairly common. 25c

9. **Rupellaria typicum,** Jonas. False Ark. North Carolina to Florida and West Indies. About ¾ inch, is usually found burrowing in masses of Vermetus nigricans. 50c

10. **Petricola pholadiformis,** Lam. Prince Edward Island to West Indies and Texas. The Florida Rock-dweller is usually found in old logs in the absence of rocks on the beaches. 50c

11. **Lithophaga nigra,** Orb. (Caribaea) Black Rock-borer. South Carolina to West Indies. Usually found living in holes in rock or coral. 75c

12. **Anomalocardia cunimeris,** Con. (rostrata) Pointed Venus. Florida and Gulf of Mexico. A neat polished small shell of the venus type, fairly common. 25c

13. **Arca reticulata,** Gmel. (gradata) Reticulated Ark. North Carolina to West Indies and Texas. A very neat small shell living in the sand and often brought up by the tides. 30c

14. **Mactra fragilis,** Gmel. Fragile Mactra. North Carolina to Gulf of Mexico to Brazil. The white, thin valves are often seen on the shore line after the tides have receded. 2" 50c

15. **Paphyridea spinosum,** Meusch. Mottled Clam. North Carolina to Brazil. One often finds the unmated, pink valves on the beaches but pairs are not too common. 2" 75c

16. **Arca transversa,** Say. Transverse Ark. Massachusetts to Texas. A small fairly common shell, on all of the beaches. 1½" 35c

17. **Cardita floridana,** Con. Bird Shell. Florida and Gulf of Mexico to Texas. Very common and collected in great quantities for use in making novelties. 1¼" 25c

18. **Arca barbata,** L. Hairy Ark. North Carolina to West Indies and Texas. After storms you usually find the specimens of this shell fairly common. 2" 50c

19. **Ostrea permollis,** Sow. Yellow Oyster. Madeira Beach, Fla. A small oyster of 1 inch of a yellowish color on back. Interior white. 50c

20. **Pedalion chemitziana,** Orb. Scaly Oyster. Miami Beach, Fla. A small 1 inch shell, outer surface scaly, inside iridescent. 50c

21. **Plicatula gibbosa,** Lam. Cats paw. North Carolina to West Indies. In the rift of shells often left by the tides, you will find plenty of valves of this fellow and often pairs. 1" 25c

22. **Serpulorbis decussata,** Gmel. Coiled Worm Shell. North Carolina to Florida and West Indies. 10 to 22 fathoms. Often found on the beaches brought up by the tides. 1¼" 50c

23. **Chama variegata,** Rve. Variegated Chama. West Coast Florida. About 1", base flat, valves pink with small fronds. 75c

24. **Sinum perspectivum,** Say. Baby Ear. New Jersey to West Indies. The Mollusk entirely covers the shell and is 3 to 4 inches. Burrows in soft sand. Quite common in shallow bays. 1 to 1½" 30c

25. **Vermicularia spirata,** Phil. Fragile Worm Shell. An odd coiled form most often found living in sponges. 1½" 50c

26. **Macoma constricta,** Brug. The Constricted Macoma. North Carolina to Brazil. A fine white species closely allied to the Tellinas. 1½" 50c

27. **Laevicardium mortoni,** Con. The Little Cardium. Nova Scotia to Gulf of Mexico. Fairly common along the whole East Coast. A small polished shell. 1" 25c

28. **Semele purpurascens,** Gmel. The Purple Semele. North Carolina to Gulf of Mexico and West Indies. The colored valves are much more common on the shore than mated shells. 1¼" 50c

29. **Tellina interrupta mexicana,** Petit. The Mexican Tellin. West Florida. Faintly colored pink, it is a trim little shell not too common. 50c

30. **Spirula spirula,** L. Little Nautilus. Pure white shells are found on the beaches from Cape Cod, Mass. to the Gulf of Mexico. It is world-wide in distribution. 1¼" 25c

31. **Tagelus divisus,** Speng. The Little Razor-clam. Massachusetts to Florida and Texas. Typical of many forms found throughout the world. 1½" 30c

32. **Diadora alternata,** Say. Little Keyhole Limpet. New Jersey to West Indies. Fairly common on many beaches. 1" 25c

PLATE 17

1. **Pinna rigida,** Dill. Boca Ciega Bay, Florida. A dark fan shell which attains nearly a foot in size. Interior deep brown. Outer surface similar and ornamented with numerous hollow extended tubes. 1.00

2. **Echinochama arcinella,** L. Spiney Chama. Marco, Florida. The outside is pure white completely covered with spines arranged in rows. Interior white and lavender. 1½" 50c

3. **Lucina pennsylvanica,** L. Pennsylvania Lucine. Grassy Key, Florida. A white shell covered with thin yellowish periostracum with prominent ridge at left. Many circular lines. Interior white. 1¾" 25c

4. **Lucina jamaicensis,** L. Jamaica Lucine. Jupiter, Florida. Outer surface with few circular lines and yellowish color. Interior reddish-yellow. 1¾" 50c

5. **Glycimeris americana,** De France. American Buttersweet. N. C. to Florida Keys. A white shell with rich wide circular irregular bands of brown. Interior white splashed with brown. You will find these shells labeled as Pectenculus, either name being O.K. 1½" 50c

6. **Pitar fulminata,** Mke. N. C. to Florida Keys. A small white shell finely blotched with brown. Interior pure white. This genus and the foreign shells of the genus Caryotis are practically the same. 1" 50c

7. **Chione interpurpurea,** Conr. West Coast Florida. A small white Venus finely lined and reticulated splashed with brown. Interior white. 1" 25c

8. **Chione latilirata,** Con. N. C. to Florida Keys. A remarkable shell with six thick curved frills. All are blotched with specks of brown and three stripes. Interior white with a splash of purple at one end. 1⅛" 50c

9. **Glycymeris pectinata,** Gmel. East Florida Coast. A small, finely ridged shell, white with irregular lines of brown. Interior rich deep brown. 1" 50c

10. **Codakia orbicularis,** L. East Coast Florida. A pure white, finely ridged and reticulated shell, the interior showing traces of yellow. 2" 50c

11. **Conus floridanus,** Gabb. N. C. to Gulf of Mexico. The specimen illustrated is finely mottled with reddish-brown, prominent sharp spire. 1¼" 50c

12. **Conus daucus,** Brug. Deep water at Carobel, Florida. It is of a rich rosy red color, top mottled with white. Small flakes of white in middle of last whorl. 1¼" 2.00

13. **Conus nebulosus,** Sol. East Coast Florida in deep water. A shell finely mottled with white and shades of brown, arranged in the form of three wide bands. Upper surface similarly mottled. 1¾" 2.00

14. **Thais undata,** Con. East Coast Florida. The shell is richly marked with white and brown, two prominent rows of small nodules in middle of last whorl. Elongated spire and thin lip. 1" 25c

15. **Murex hexagona,** Lam. Lake Worth, Florida. A small reddish-white shell, with several prominent ridges, regularly adorned with short spines. Nearly 1". 50c

16. **Cerithium atratum,** Born. Florida Keys. A black and white shell finely ornamented with one prominent ridge in middle of each whorl, and sharp spines regularly placed thereon. Upper whorls show numerous early growth marks. 1¼" 25c

17. **Terebra hastata,** Gmel. East Coast Florida. A glistening white shell, each whorl of which is ornamented with wide band of brown. 1¼" 25c

THE MARINE SHELLS OF THE WEST COAST OF THE UNITED STATES

I BELIEVE THAT EVERY ONE will agree that the late William H. Dall of the United States National Museum was our foremost student of the marine mollusca of this region. Beginning in 1865, when he was a member of the scientific expedition conducted to the west coast by the Western Union Telegraph Company, for fifty years he had spent much of his time working on this remarkable fauna. His complete list of the mollusca of the region was published as Bulletin No. 112 in 1921.

In the following pages I have included some of the most important species ranging from the Arctic Ocean to the Gulf of California. This vast coast line includes species from three divisions, the Arctic, Temperate and Tropical faunas, although very few that can be included in the last division.

About 2,150 species are found in this region, of which 1425 are Gastropoda, 500 Pelecypoda and the balance include Pteropoda, Chitons, Dentaliums, etc. It will be seen from this total that the east coast shows a few hundred species more than the west, and I believe this is due to the fact there have been more extensive dredging operations in that territory. The number of shore species down to moderate depths is about the same.

The earlier works on the mollusca of the west coast are largely confined to small booklets, covering only a few hundred species and are of little use today. But in recent years, some very fine up-to-date books have been published, which are invaluable to the collectors of that region.

The Marine Shells of the West Coast of North America was published in 1924, the writer being Mrs. Ida S. Oldroyd. This splendid work is bound in four fine volumes of about 250pp each, with 108 full page plates, finely executed. While not all the species are illustrated the most important forms are shown with splendid figures. In most cases the original description of the species is given, and as numerous early writers wrote their descriptions in latin, that language is used in such cases. The range of each species is also given as far as then known. It is without doubt the best work on American Marine shells that has yet appeared. The same author also wrote a special report on the marine shells of the Puget Sound region which she had extensively dredged.

West Coast Shells, a small manual that is very useful to carry on collecting trips was published in 1935. This book of some 340 pages, has splendid descriptions and numerous illustrations. The author, Dr. Joshua L. Bailey, was well equipped to do a good job and I am sure collectors everywhere appreciate his work.

SHELL COLLECTORS WHO WISH MORE EXTENSIVE BOOKS ON THEIR HOBBY CAN ORDER THE FOLLOWING DIRECT FROM THE AUTHOR OF THIS BOOK OR ANY DEALER IN SHELLS WILL SECURE THEM FOR YOU.

Handbook For Shell Collectors contains only Foreign Marine Shells. You will find over 300 kinds of Conus, 130 Cypraea, 40 Murex, 50 Voluta and many other genera well illustrated. It is now in its 9th edition and has been the largest selling shell book in the world. About 2000 illustrations. Only $5.

United States Mollusca contains only shells from U.S.A. It covers about 600 kinds from East Coast, 300 from West Coast, the more common Land Shells, Fresh Water Shells and a large assortmnent of Unios or Fresh Water Clams. No other book on U S A shells covers so much at so small a cost. A real library on the shells of this territory will now cost over $200. The new 1951 edition covers over 1500 illustrations and descriptions. Price $5.

Foreign Land Shells is the first book ever issued in this country on the subject that covers over 1400 species included in 262 genera. In one small volume of 220 pages you get a real grasp on the Land Fauna of the world that is just as extensive as the marine and equally as fascinating to collect. The shells take up less room and cost far less than marine on the average. A doctor, after looking over his copy, wrote the author, "That any collector who failed to have the book in his library was a plain 'damfool.'" Price $5.

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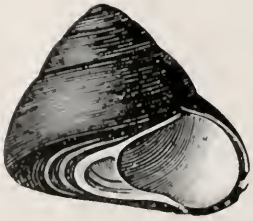

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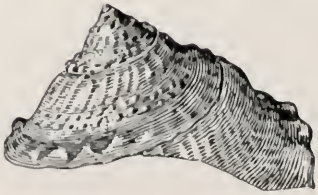

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PLATE 18

1. **Haliotis cracherodi,** Leach. Black Abalone. Oregon to Lower Calif. It has a smooth back, and inside is iridescent. It takes a high polish and the brilliant black markings contrast strongly with the white pearl. 4 to 6".
Natural 50c Highly polished 1.50

2. **Haliotis fulgens,** Phil. Blue Abalone. Southern California. This species attains a larger size than the preceding, interior is more highly colored and the back takes a fine polish, showing up iridescent colors. 6 to 7".
Natural 1.00
Highly polished 3.00 to 5.00

3. **Haliotis rufescens,** Swain. Red Abalone. California Coast. This is the largest form on the West Coast and like the others, the back takes a high polish, showing brilliant patches of fiery red. The Haliotis hide among the rocks and as they grow older settle down to a permanent location. The back is often so fully covered with sea growths, it is hard to detect the shell from the rocks. A solid iron bar is necessary to detach them. Most of the species are now protected by law. 7 to 8".
Natural 1.00
Highly polished 3.00 to 5.00

4. **Haliotis,** White form. This cut is used to illustrate the species that are naturally white and devoid of other color. The largest come from Japan and others from Mediterranean, etc. Most of the white species are rather thin and for that reason, not so extensively used for commercial purposes. They all take a high polish. 5 to 6".
Natural 50c Highly polished 2.00

5. **Murex festivus,** Hinds. The Festive Rock Shell. San Pedro, Calif. There are three frills on each whorl that are reflexed, alternating with rounded knobs. When cleaned it is a very attractive shell. Prefers the warmer waters of the south coast. 2" 50c

6. **Ceratostoma nuttalli,** Con. Nuttalls Hornmouth. Southern California. Has three prominent ridges and a small sharp horn at the base. Of a rusty brown color, if not removed in cleaning. Rather attractive. 2" 50c

7. **Tritonalia poulsoni,** Nutt. Poulson's Rock Shell. Southern California. The surface is strongly marked with knobby varices. A fine grayish species that is white inside. 2" 50c

8. **Polinices Lewisii,** Gould. Lewis' Bulls eye, Puget Sound, Wash., and most of the West Coast. This is the largest species of the genus and believed to be the largest in the world. It is carnivorous. Has been seen to bore a hole in the umbones of a bivalve in 30 minutes. Has leathery operculum. Attains 4 to 5". 1.00

9. **Tegula funebralis,** Ads. The Black-Top Shell. California Coast. It is jet black and like all others of the genus, clings to the rocks often in the surf where it is hard to collect the specimens. One of the finest of the genus. 1½" 25c

10. **Astraea undosa,** Wood. Wavy Turbine Shell. Southern California. The surface is wavy, covered with a thick periostracum, which when removed and the surface buffed, shows a shiny pearl surface. One of the largest and heaviest of the genus attaining 5 to 6" but the medium size shells with the attractive periostracum are best.
Natral 50c to 1.00
Highly polished 3.00

PLATE 19

1. **Argobuccinum oregonensis,** Redfield. The Oregon Triton. Alaska to Puget Sound. They are covered with a hairy periostracum which, if removed shows a handsome white shell, but to my notion looks best in its attractive coating, well illustrating cold water shell.
3 to 4″ 1.00

2. **Surculites carpenterianus,** Gabb. Carpenters Tower Shell. Monterey Bay in very deep water. Must be dredged. The surface is covered with fine reticulations. A rare shell only occasionally seen. Belongs to the great Turris family, the shells with a notch.
3″ 3.00 to 5.00

3. **Macron aethiops kelletti,** A. Ads. Kellett's Macron. Lower California Coast. A neat dark colored species, the largest of the genus. 2 to 3″ 1.00

4. **Ranella Californica.** Hinds. California Frog Shell. Monterey to southern California. A fine, large, yellowish-brown shell but you get no idea of its beauty as taken from the water, as it being usually covered with incrustations of all sorts. Lives on mud flats and is one of the finest Ranellas in the world.
3 to 6″ 1.00

5. **Cypraea spadicea,** Sow. Chestnut Cowry. Southern California. The rich dark brown color of the back of the shell is in striking contrast with the bluish cast of the base, and white teeth. A very attractive shell and not real common.
1½ to 2″ 1.00

6. **Cancellaria cooperi,** Gabb. Coopers Cancellaria. Usually dredged in southern part of California. Fishermen occasionally bring up one in their nets. It is the largest of the genus in the world and has always been a rather rare shell.
2 to 3″ 3.00 to 5.00

7. **Katherina tunicata,** Sow. Black Katy. From Oregon coast southward. Shell is smooth and black with wide leathery margin. Easily identified from all other Chitons. 2½″ 50c

8. **Cryptochiton stelleri,** Midd. The Great Chiton. California coast and is also found in Japan. Very widely distributed and is largest Chiton in world. Usually 6 to 7″ but specimens have been taken to 10″. It lives on rocks below tide line and not very easy to find or collect them due to heavy surf. 2.00 to 5.00

9. **Ishnochiton magdalensis,** Hinds, Magdalena Bay Chiton. Coos to Magdalena Bay. Quite a large species that lives under the rocks at low tide. It has a rough sculpture and low arched valves.
3″ 75c

10. **Tonicella lineata,** Wood. The Red-lined Chiton. All California Coast. Of a yellowish-brown color with wavy lines of orange, red and green. A striking shell.
1¼″ 50c

11. **Acanthina lugubris,** Sow. The Sad Unicorn Shell. California coast. Of a brownish color, it has a little horn near the base of the aperture, from which it takes its name. 1″ 25c

12. **Ceratostoma foliatum,** Mart. The Leafy Horn-mouth. California Coast. The three wing-like varices, white color and large size are its striking features. Good specimens are usually dredged as it is rarely found on the beaches.
2 to 3″ 1.00

13. **Polinices recluziana,** Desh. Recluz's Bullseye. Southern California. The heavy patch of enamel covering the columella is a distinguishing feature. There is a variety imperforata, Dall. in which the patch of enamel completely covers the umbilicus and alta, Brod. which has an elevated spire. 2″ 50c

14. **Norrisia norrisii,** Sow. The Norris Top Shell. Southern California. It has a leather periostracum of brown color, and curious operculum. As it is a pearly shell, will take a high polish. 2″ 50c

15. **Megathura crenulatus,** Sow. Great Keyhole Limpet. California Coast. The mollusk is much larger than the shell and attains 8″ while the shell is 2½ to 3″. Only a few Keyholes attain such a large size. The shell lives wholly below the tides and is of a whitish color. 50c

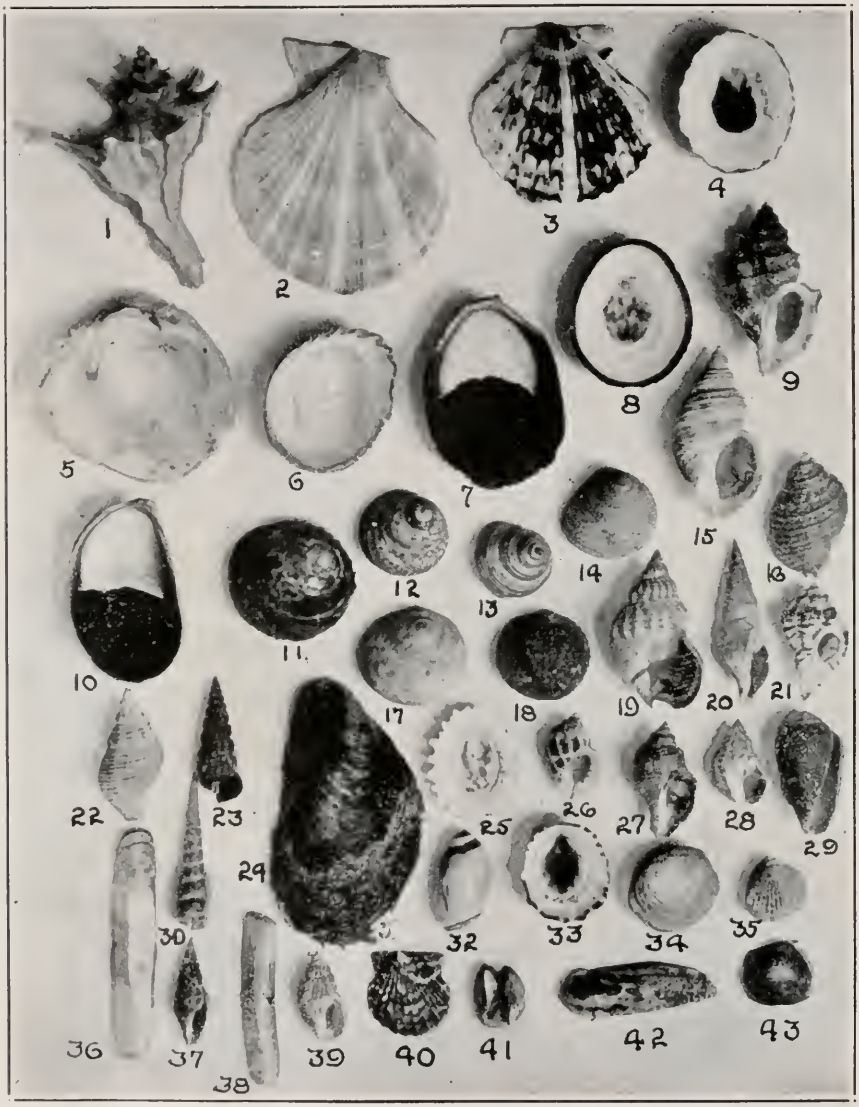
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PLATE 20

1. **Trophon triangulatus,** Carp. Three-cornered Trophon. Of a reddish-brown color, it lives in deep water. Not often found on shores in good condition. Rare. 3" 5.00

2. **Pecten hericius,** Gould. The Pink Scallop. is found in deep water in Puget Sound. A very beautiful shell. 2 to 3" 50c

3. **Pecten circularis,** Sow. South coast. Finest specimens are dredged and often brilliant colored shells are seen. 3" 50c

4. **Acmaea pelta,** Esch. Shield Limpet. A fairly common conical shell. Distinguished by its 25 blunt ribs. Inside is white with a dark thread around the edge. 1" 25c

5. **Chama exogyra,** Con. Reverse Chama. Oregon to Panama. Of a dirty white color but cleans up into attractive specimens. 2" 50c

6. **Capulus californicus,** Dall. California Cap-Shell. Quite rare and usually found attached to Pecten diegoensis, which is also rare. Has brown periostracum. 1" 1.50

7. **Crepidula onyx,** Sow. Slipper Shell. A fine large species of dark color from lower California. 2" 25c

8. **Acmaea limatula,** Carp. (scabra). The File Limpet. California. Closely resembles patina. Light brown or whitish and covered with scaly ridges. About one inch. 25c

9. **Thais lamellosa,** Gmel. Wrinkled Thais, Puget Sound. Many specimens are finely frilled and richly colored with white or reddish. There are also smooth varieties 2" 25 to 50c

10. **Crepidula onyx rugosa,** Nutt. San Diego. A richly colored species which attains two inches. 25c

11. **Tegula brunnea,** Phil. Brown Top Shell California. Of a rich brown color it is very common on rocks at low tide. 1¼" 25c

12. **Tegula funebralis.** A. Ads. Black Top-shell. California. A very common dark species living on rocks usually between the tides where it gets the full force of the waves. 1¼" 25c

13. **Calliostoma costatum,** Mart. Ribbed Top-shell. California. Has four rounded whorls with spiral ridges. Is a blue pearly color when cleaned. 1" 25c

14. **Calliostoma annulatum,** Mart. The Ringed Top-shell. California. Reddish or yellowish-brown shaded with violet. Usually found living on broad stems of kelp some distance from shore. 1½" 50c

15. **Thais lima,** Mart. Rough Thais. California. Lives in fairly deep water. Spire has four whorls which are ornamented with fifteen spiral grooves. 1¼" 25c

16. **Thais emarginata,** Desh. Rock-dwelling Thais. California. Very common and very variable. Quite similar to the east coast species lapillus. 1" 25c

17. **Tegula aureotincta,** Forbes. Gilded Top-shell. South coast California. Whorls are banded by spiral ridges with wavy crossings. Umbilicus has yellow stain. 1¼" 25c

18. **Tegula ligulata,** Mke. Banded Top-shell. California. A solid little shell with spiral knobby lines. Takes a fine polish. 25c

19. **Nassa fossatus,** Gld. Channelled Dog-Whelk. Washington to Mexico. Largest of the genus on the West coast and one of the largest in the world. It burrows in the mud. Orange and ashy color. 1½" 25c

20. **Moniliopsis incisa ophioderma,** Dall. (pencillata) Snake-skinned Tower-shell. South coast California. The aperture is long and spire has eight whorls. 1" 25c

21. **Murex gemma,** Sow. Gemmed Rock-shell. South coast California. The color is brown and white. There are several varieties, all quite rare. 50c

22. **Searlesia dira,** Rve. Dire Whelk. California. Only the one species, which much resembles other foreign species of the genus Euthria. 1¼" 50c

23. **Cerithidea californica,** Hald. California Horn Shell. California. It is of a blackish color and common on bushes along the coast. 1" 25c

24. **Modiola modiolus,** L. Great Horse-mussel. Puget Sound and points south where it attains eight inches and four inches in diameter. The periostracum is bearded near the edge. Takes a fine polish. 50c to 1.00

25. **Acmaea digitalis,** Esch. Fingered Limpet. California. Very common on north coast. Has radial digitations to the periphery. 1" 25c

26. **Tritonalia circumtexta,** Stearns. Circled Rock-shell. California. Outside is white with brown spots; inside reddish. 50c

27. **Acanthina spirata,** Blv. Angular Unicorn-shell. California. Usually found mixed with sea weed clinging to the rocks. Very common. 1" 25c

28. **Nassa tegula,** Rve. Tile-roof Dog-Whelk. South coast, always found common on mud flats. 25c

29. **Conus californicus,** Hinds. California Cone, South coast. Very common. Has brown periostracum. 1" 50c

30. **Turritella cooperi,** Carp. Coopers Turret Shell, South coast. It loves to push around in the beach sand. 1½" 25c

32. **Olivella biplicata,** Sow. Purple Olive. California. A fine polished shell which attains one inch. Usually found burrowing in sandy shore. 25c

33. **Acmaea scabra.** Gould. (spectrum). The Rough Limpet. California. Of a gray exterior, the inside is white and dotted with spots. A very variable shell which usually lives high on the rocks. 1" 25c

34. **Semele rupicola,** Dall. Rock-dwelling Semele. From Santa Cruz southward. A very nearly circular white shell. 1¼" 25c

35. **Venericardia barbarensis,** Stearns. Venus Heart. Santa Barbara. Good specimens are usually dredged at 200 or more fathoms. 1.00

36. **Solen rosaceus,** Carp. Rosy Razor-clam South coast. Two inch, rosy-white and has horn colored periostracum. 35c

37. **Psudomelatoma moesta,** Carp. The Doleful Tower-shell. South of Monterey. Of a brownish color, each whorl is marked with cross ribs. 50c

38. **Ensis californicus,** Dall. California Razor-clam. Monterey southward. It is two inches, narrow, curved, and somewhat rare. 50c

39. **Amphissa columbiana,** Dall. Columbian Amphissa. A northern species happy in cold Alaskan waters, but has been found in deep water at San Francisco. 25c

40. **Pecten Latiauritus monotimeris,** Con. Monterey southward. Thin yellow and brown, mottled with zigzag lines. 1" 25c

41. **Mytilus adamsianus,** Dunk. Adams Mussel. South coast. Often eroded on outside but inside is of dark purple pearly color. 1" 25c

42. **Lithophaga plumula,** Hanley. Rock-eating Mussel. California. It loves to burrow in rock or other shells. 1 to 2" 50c

43. **Tylodina fungiana,** Gabb. Mushroom Umbrella-shell. Has limpet-like shell which is entirely covered with a pinkish mantle. South coast and quite rare. 1.00

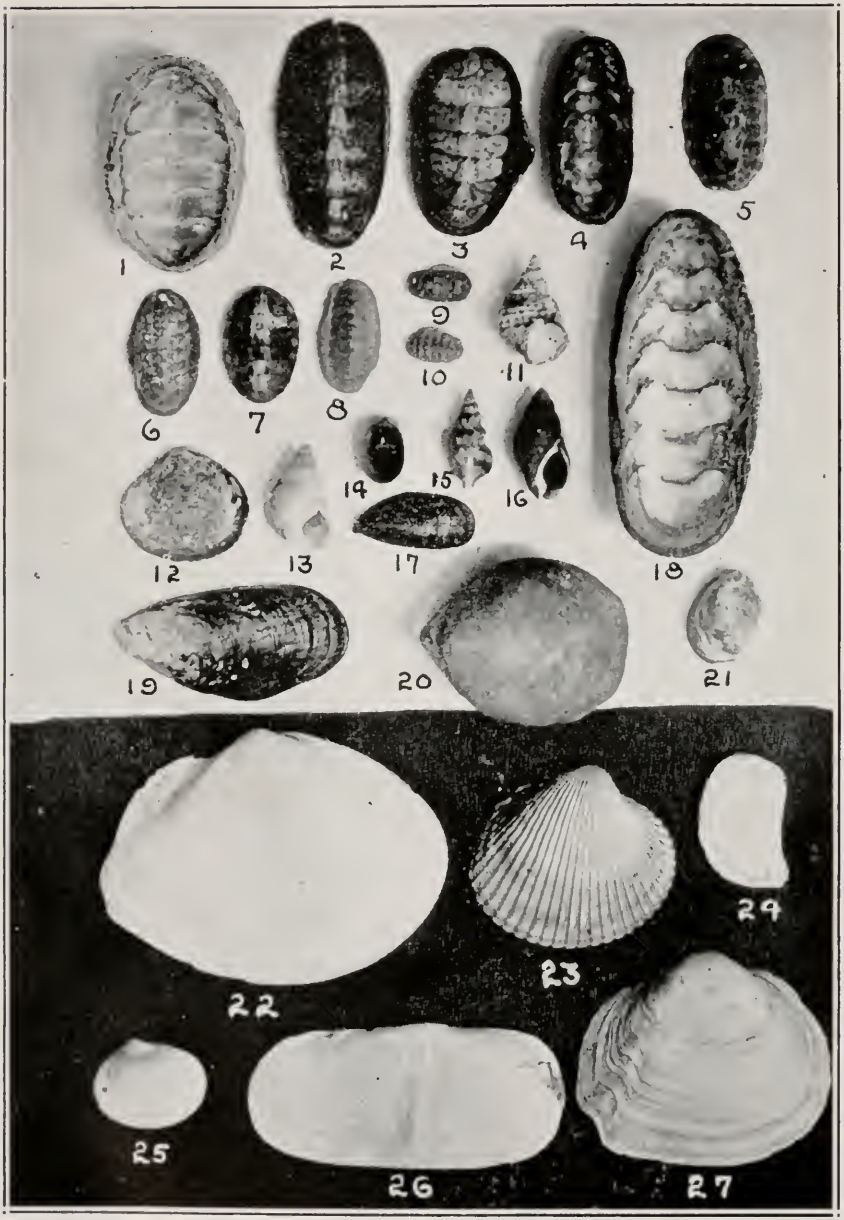

PLATE 21

1. **Mcpalia muscosa,** Gould. Mossy Chiton. Alaska south to Mexico. Girdle is covered with stiff hairs. Inside bluish-green. 1 to 2" 50c

2. **Mopalia ciliata,** Sow. Hairy Chiton. Washington to Mexico. Girdle wide, yellowish or brown with some brown hairs. Usually brighter color than muscosa. 1½" 50c

3. **Mopalia ciliata wosnessenskii,** Midd. Wosnessenski's Chiton. Shell is more elongated and roundly arched back. Olive or drab color. Some range as ciliata. 1½" 50c

4. **Nuttalina californica,** Rve. California Chiton. Very common. Will often be found high on rocks at low tide. Valves often much eroded. 1½" 50c

5. **Ishnochiton mertensii,** Midd. Mertens' Chiton. Alaska to Lower California. A reddish species with rich sculptured valves. Mantle covered with fine round scales. 1¼" 50c

6. **Ishnochiton clathratus,** Rve. Trellised Chiton. South coast. Richly sculptured and light green inside. Often confused with cooperi. 1¼" 50c

7. **Tonicella hartwegi,** Carp. Hartweg's Chiton. Alaska to Lower California. Olive green, 1", almost flat shell. 50c

8. **Ishnochiton regularis,** Carp. Regular Chiton. California. Finely sculptured and is of olive or slatey-blue with light blue interior. 1½" 50c

9. **Callistochiton decorata,** Carp. (top) Decorative Chiton. Southern California. A small form, finely sculptured, of a reddish or yellowish-brown. Found along south coast. 50c

10. **Chaetopleura gemma,** Carp. (bottom). Gem Chiton. Monterey south. Color varied from red to yellow. Valves rough. 25c

11. **Trichotropis cancellata.** Hinds. Checked Hairy-shell. The gray Periostracum is covered with hairs. A real cold water species from Alaska to Washington. 1" 50c

12. **Glycymeris subobsoleta,** Carp. Medium Ark. Solid, as are all the genus. Of a brownish-white. Whole coast. 2" 50c

13. **Nassa perpinguis,** Hinds. Fat Dog-whelk. Very common from Washington to Mexico. A whitish finely checked shell covered with tiny squares. 25c

14. **Acmaea incessa,** Hinds. Seaweed Limpet. California. Usually found living on the flat branches of giant sea weeds. A neat small dark brown shell. 25c

15. **Fusinus luteopictus,** Dall. Painted Spindle-shell. California. A light yellow and brown shell, quite rare in most localities. 1" 50c

16. **Macron lividus.** A. Ads. Livid Macron. Around San Diego and southward. Of a brownish color. 25c

17. **Septifer bifurcatus,** Rve. Branch-ribbed Mussel. South beaches. Not common. A dark colored shell much like Mytilis adamsianus but has a small check across the interior of the shell. 1¼" 25c

18. **Ishnochiton conspicuus,** Carp. Conspicuous Chiton. Monterey to Mexico. Girdle has short bristles, and is pink inside. Attains 3½". Is often confused with magdalensis which has rough sculpture and white internally. 50c

19. **Mytilis californianus,** Con. California Mussel. California. Ribs very conspicuous. Of a purple color. Attains 7 or 8" and takes a high polish. 2" 50c

20. **Laqueas californicus,** Koch. California Lamp Shell. Thin and smooth, of a reddish color. Fishermen often bring up clusters in their nets. 1¼" 50c

21. **Volutharpa haysiana,** Bern. Alaska. A horn-colored shell with thin periostracum, usually found in deep water. 1 to 1½" 50c

22. **Macoma secta,** Con. Giant Macoma. Alaska to Mexico. Thin and white, largest of genus. 3" 50c

23. **Cardium corbis,** Mart. Basket Cockle. Very common on all west coast. Considered good eating. Shell brittle. 3 to 4" 50c

24. **Pandora filosa,** Carp. Puget Sound. A small white shell, typical in form of most of the species of the genus. 1" 50c

25. **Heterdonax bimaculatus,** L. Spotted False Wedge-shell. Of a purple and white color. It is common along south coast. 1" 25c

26. **Tagelus californianus,** Con. California Razor-clam. They burrow in mud along south coast. 2 to 3", of a gray color. 25c

27. **Apolymetis biangulata,** Carp. (meta) Yellow apolymetis. California. Usually whitish outside and yellowish inside. Common. 2 to 3" 50c

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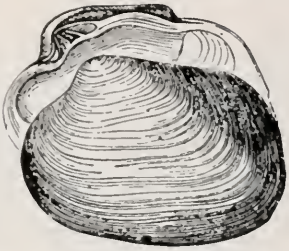

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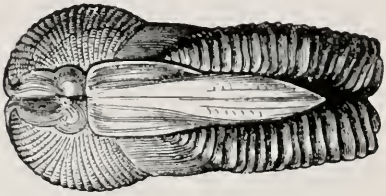

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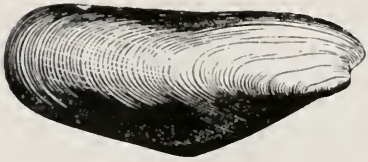

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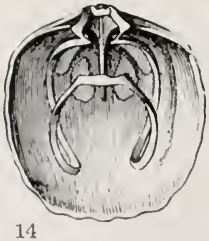

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PLATE 22

1. **Hinnites giganteus,** Gray. The Purple-hinge Scallop. California coast. These strange shells of irregular shape are always a puzzle. The first years growth is like a small Pinna or Fan Shell, when they start to assume the form of a scallop and make quite a job of it. There are only three known species and this is the largest, attaining 3 to 4". They have a reddish-purple spot on the inside near the hinge. 1.00

2. **Saxidomus nuttalli,** Con. Nuttalls Saxidome. Southern California coast. It is covered with rough concentric rings, white and 2 to 3". 50c

3. **Chama pellucida,** Sow. Agate Chama. San Pedro. One of the finest of the West Coast forms and will compare favorably with any known species. They are always firmly fastened to a rock and often grow in clusters. Of a pearly white, occasionally rose-red shadings. 1½ to 2" 50c

4. **Mytilimeria nuttalli,** Con-Nuttall's Sea bottle. California coast. A curious form of shell only found in the clumps of Sea Anemones which are often found under large rocks. There are many forms of sea shells that live happily with other lower invertebrates. 1" 75c

5. **Pholos in Rock.** Illustration shows how many forms of thin slender shells will thoroughly perforate hard rock, as a protection. How they excavate their burrow has been studied for generations. Some forms live deep in their burrows and others protrude slightly.

6. **Barnea pacifica,** Stearns. Pacific Piddock. California coast. All the Piddocks of the world being tender shells must live in a burrow of wood or rock as shown in illustration. Some species are quite small but this form attains 2½". 1.00

7. **Modiolus rectus.** Con. The Straight Horse-mussel. California coast. A smooth brownish shell attaining 3 to 4" and often adorned with numerous hairs which enables it to attach to other shells of the same species forming a family cluster. 50c

8. **Botula falcata,** Gould. Hooked Peapod Shell. Southern California. A borer which has no trouble in perforating the hardest rock, making an even round hole, protecting its very thin shell. It also spins a brissus to more thoroughly attach itself to its rocky home. It has a dark chestnut periostracum, covered with transverse wrinkles. 2½" 50c

9. **Pododesma macrochisma,** Desh. Pearly Monia, Puget Sound. One of the large species of the world, of the genus Anomia. There are only six species of its class, one being in far off China. Attains 3". 50c

10. **Ostrea lurida,** Carp. The Lurid Oyster. California coast. Of a dull color like most of the Oyster tribe, is rather small and stubby but like many other species assumes various shapes, some of which have been named. Some of the varieties have reddish shell. 2" 25c

11. **Pholadidea parva,** Tryon. The Little Piddock. California coast. It is a very small species, no larger than cut and often much smaller. Usually found burrowing in back of Haliotis shells. If they burrow too deep, the Haliotis will try to protect itself by forming bulbous blotches of nacre and thus prolong its life. 75c

12. **Macoma inquinata.** Desh. Polluted Macoma. Puget Sound. This genus of shells in western hemisphere are mostly white and rather thin. These are about 75 species in the world and some attain rather large size. 1 to 3" 50c

13-14. **Terebratalia occidentalis,** Dall. The Western Lamp Shell. Southern California. One of the great Brachiapod shells which are of world-wide distribution and range through various genera. Most of the thousand of species are fossil in the rocks, only a few now living in the oceans. The two illustrations show both outside and inside of shell. 1¼" 50c

15. **Tagelus subteres,** Con. Subcircular Razor Clam. California coast. A shell with violet rays and dark periostracum that burrows in the sand. There are a number of species on both coasts. 2½" 30c

16. **Lithophaga plumula,** Hanley. Rock-eating Mussel. California coast. It has a small cylindrical brownish shell, with which it burrows in the rock or other handy substances. 1 to 2" 50c

17. **Glottidea albida,** Hinds. Whitetongue Shell. Monterey to Lower California. A fine little grayish brachiopod of about 1¼". They burrow in the mud, the tip of each shell just below the surface. 50c

(Descriptions of 18 to 22 at bottom of Plate 23)

PLATE 23

18-19. **Terebratalia transversa,** Sow. Transverse Lamp Shell. California coast. The largest specimens have come from Puget Sound. Illustration shows inside and outside of shell. 1½" 50c

20. **Acmaea patina,** Esch. The Plate Limpet. California coast. The outside is of dark color with radiating lines. Inside there is a dark ring around the edge, then a broad bluish-white lining and near the center a patch of brown. But there are many variations. 1½" 25c

21. **Hipponyx antiquatus,** L. The Ancient Hoof-shell. California coast. There are three species on this coast and all differ widely. This little fellow is about half an inch and loves to live on back of other shells. There are about 30 species in the world. 25c

22. **Crucibulum spinosum,** Sow. The Cup and Saucer Shell. California coast, mainly south. It lives on the rocks, often well camouflaged. You pry them off with a sharp knife. In the warmer waters of the ocean there are 2 inch forms but this species is about an inch. 50c

1. **Semele decisa,** Con. The Clipped Semele. Common near Point Loma and other southern points. A very round, large wrinkled shell with highly polished interior. 2¼" 50c

2. **Chione succincta,** Val. Banded Chione. California. Usually of yellowish cast outside and interior white. Strong heavy shell. 2" 50c

3. **Chione fluctifraga,** Sow. Smooth Chione. California. Surface almost smooth and interior purple. 2" 50c

4. **Chione simillina,** Sow. False Wavy Chione. Very common in south section. Can usually be easily distinguished by the greater number of concentric lamellae. The above three species are strong heavy shells. 2" 50c

5. **Venerupis staminea,** Con. Ribbed Rock-venus. California. Very common everywhere. Finds ready sale in Northern markets. Color chocolate to white and often with chevron markings. 2 to 3" 50c

6. **Tivela (pachydesma) stultorum,** Mawe. The Great Tivela. Pismo Clam. A large thick heavy species ranging up to five inches. Yellowish-white, often rayed with purple. Mollusk very good for food. Common in southern section. 3 to 5" 50c

7. **Lucina californica,** Con. California Lucina. California. Pure white and common along the southern coast. 1¼" 35c

8. **Psammobia californica,** Con. Sunset Shell. Burrows in sand. Covered with thin brown periostracum. Often finely rayed with red. Washington to Southern California. 3" 50c

9. **Mya cancellata,** Con. Checked Softshell Clam, Southern Coast. White, 2 to 3". Usually thicker and heavier than other species. 50c

10. **Tellina salmonea,** Carp. Salmon-colored Tellin. Typical specimens often only ½". Nearly white outside, salmon inside. Pacific Grove. 1½" 75c

11. **Petricola caritoides,** Con. Heart-shaped Rock-dweller. California. Very variable in shape. Bores in soft rock or often lives in holes made by other mollusks, and forms shell to fit hole. Dingy-white. 1 to 2" 50c

12. **Natica aleutica,** Dall. Arctic Bullseye, Alaska. Fairly common in shallow bays. Uncolored. 1½" 50c

13. **Sinum debile,** Gould. Frail Bullseye. South coast. Pure white, flat with large aperture. Burrows in sand. 1½" 50c

14. **Acmaea mitra,** Esch. White Cap Limpet. Very conical and white. Often covered with knobby nullipores. Lives below low tide. Alaska south to Mexico. 1¼" 25c

15. **Cardium substriatum,** Con. Eggshell Cockle. South coast. White and often mottled inside. A small species. 25c

16. **Lyonsia californica,** Con. California Lyons Shell. Washington to lower California. A thin, small, interesting species that lives in holes to protect its shell. 1" 50c

17. **Lucapinella callomarginata,** Carp. Hard-edge Keyhole Limpet. South Coast. About ¾", gray exterior, white inside, lives below low tide. 50c

18. **Janthina exigua,** Lam. Little Violet-snail. California. Very thin and fragile. The female forms a float which contains the eggs. It is pelagic and floats on the surface of the sea. If stormy, at such times, great quantities are thrown on the shore. 35c

19. **Dentalium pretiosum,** Nutt. Precious Tusk Shell. Puget Sound. Shells labeled indianorum are the same. The Dentaliums have neither head, heart, eyes or gills. The foot protrudes from large end with which it burrows in sand. Tiny tentacles emerge from small end. 1¼" 25c

20. **Epitonium hindsii,** Carp. Lower California. A very neat small form, pure white and very common. 1" 25c

21. **Macoma indentata,** Carp. Indented Macoma. South Coast. The edge of the shell is indented and beaked, differing from the larger form secta in this respect. Pure white. 1¼" 25c

22. **Periploma planiuscula,** Sow. Silver Lantern Shell. Can always be identified by its spoon-like teeth. White, smooth. South Coast. 2" 50c

23. **Epitonium crenatoides,** Carp. Lower California. A very distinct small species. It lacks the usually fine ribs with which so many forms are adorned. 25c

24. **Donax californica,** Con. California Wedge-shell. Of a horn color and only occasionally striped. It is thinner and less highly colored than the next species. 25c

25. **Donax gouldsii,** Dall. Gould's Wedge-shell. This is the species that used to be labeled **Californica.** Very common. Colors varying from purple to white and often striped. Often seen on the beaches by the thousands. 25c

26. **Amiantis callosa,** Con. White Amiantis. South Coast. 3 to 4", very fine, white shell, almost smooth. 2 to 3" 1.00

PLATE 24

1. **Periploma discus,** Str. The Round Lantern Shell. Southern California. A shell as thin as paper, white, slightly elongated at one end. There are about 17 species known. Those I had in my collection ranged from California to Australia. 1¾" 50c

2. **Macoma inconspicua,** B&S. The Little Macoma. Oregon to Monterey. A thin nearly round, white shell and interior chalky white. 1¼" 25c

3. **Thracia curta,** Con. The Short Thracia. Alaska to San Diego. A dull white shell with irregular edge of valves, usually showing growth marks and white inside. There are about 38 species in the world. A few in all seas. 2" 1.00

4. **Pecten islandicus beringiana,** Midd. Alaska. A reddish shell with many prominent ribs, some close together and some about twice as high as other. Rather unusual in a pecten. 2¼" 1.00

5. **Pecten jordani,** Arnold. Jordan's Scallop. Alaska. A drab colored shell, with shades of pink near the umbones, course ribs and growth marks near outer edge. Interior white, shading to pink near hinge. 1¾" 1.00

6. **Cardium ciliatum,** Fabr. The Bearded Cockle. Alaska. A thin yellowish-white shell with prominent dotted ridges. Interior yellow. 1¼" 50c

7. **Glycimeris subobsoleta,** Cpr. The Medium Ark. Friday Harbor Washington. A small thin white shell with tent-like markings of brown. Interior white with brown blotch at one side. About 1". 50c

8. **Cardium groenlandicum,** Ch. The Greenland Cockle. Alaska. A rather thin yellowish-white shell, almost smooth. 1¾" 50c

9. **Tellina idae,** Dall. Ida's Tellin. Southern California coast. A pure white finely lined shell not real common. 2¼" 75c

10. **Thracia beringi,** Dall. Alaska. A very thin nearly smooth pure white shell of about 1". 50c

11. **Entodesma saxicola,** Baird. Alaska. A rather coarse irregular shaped shell with very thick black periostracum. Interior white shading to brown. 3½" 1.00

12. **Astarte rollandi,** Bern. Alaska. A finely lined rich dark brown shell white inside. 1¼" 50c

PLATE 25

1. **Siliqua patula,** Dixon. Oregon. The Flat Razor-clam. The entire surface is yellowish-brown with traces of violet. It is a large shell which burrows in the sand and can often be detected by the water being thrown up by the siphon as one walks along the beach. It is said to be the first shell described from the West Coast which you will find in the excellent book written by Captain George Dixon, published in London in 1789. His men found the shell meat very fine eating and much enjoyed. Usual specimens 5". 1.00

2. **Platycodon cancellata,** Con. The Checked Soft-shell Clam. Closely related to the genus Mya but of different habits. The shell is grayish-white with opening at one end for the large siphon. Fairly common along the South California coast. 2 to 3" 50c

3. **Macoma secta,** Con. Whole West Coast. The Giant Macoma. A thin glistening white shell with thin yellowish periostracum. 2" 50c

4. **Macoma nasuta,** Con. West Coast. A fairly smooth white shell with brownish periostracum. 1½" 25c

5. **Pholadidea ovoidea,** Gld. San Diego. The Oval Piddock. Rounded oval at one end extending downward to a rounded point. White above, with blackish periostracum below. It is a good borer in wood or rock. 1½" 50c

6. **Semele rubro picta,** Dall. San Diego. A large oval shaped shell with fine lines and frequent growth marks. White tinged with pink. Interior white. 1¾" 50c

7. **Sanguinolaria nuttalli,** Con. Nuttall's Sanguinolaria. California. A rather round thin shell covered with a brilliant yellowish-brown periostracum. Interior a rosy-purple. 2½" 75c

8. **Venerupis lamellifera,** Con. Monterey, Calif. The Laminated Rock Venus. Within recent years the genus name has been changed to Irus but the old name is more in line with the many other species of the genus. The shell is white inside. 1½" 50c

9. **Modiola capax,** Con. The Black Horse Mussel. Common at San Pedro. The ground color is a deep pink which is covered with a thick hairy periostracum. Interior mostly white. Fresh shells should be wiped dry and coated with a solution of white shellac or the strong coating will quickly peel off in part. 2½ to 3½" 50c

10. **Apolymetis biangulata,** Carp. The Yellow Apolymetis (Old name was Metis alta, Con.). It is a rounded oval shell, wrinkled at one end and fine concentric lines. White with tinge of yellow. Southern California. 2" 50c

11. **Mactra planulata,** Con. The Flat Mactra, Monterey southward in California. A thin yellowish-white shell shaped much like nasuta. 1¾" 50c

12. **Cryptomya californica,** Con. The California Shoft-shell Clam. California coast generally. A small yellowish elliptical shell rather thin, about 1". 25c

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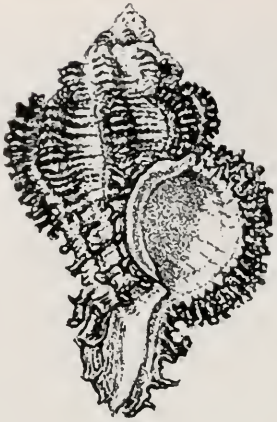

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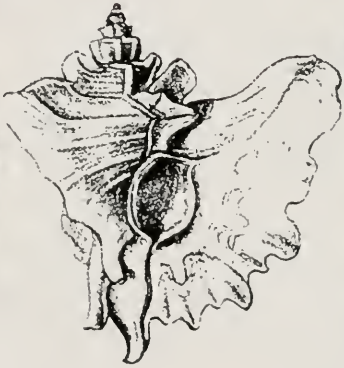

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PLATE 26

1. **Murex endivia,** Lam. Philippines. A handsome brown and white marked shell with curved spines or none at all, which is fairly common on the shores of Cebu and other similar situations. Usually about 3". 1.00

2. **Murex stainforthi,** Rve. Stainforth's Murex. Northwest Australia. Has several rows of blackish ridges which will distinguish it from other forms. There are few shell collectors where it is found hence not very common in collections. 2" 2.00

3. **Murex palmarosea,** Lam. Indian and Pacific Oceans. Never very common anywhere. It is a wonderfully fine brownish species and from some localities the edges of the fronds are pink. There are other forms of similar style and rarer. There never seems to be enough shells of this species to supply the demand. 3" 7.50

4. **Murex radix nigritus,** Phil. Black Murex: West Mexico and Panama. There is another similar form with only a few rows of varices and is found to run much larger in size than this form. Usual size of rich black shells is 3 to 4". Small 2". Specimens have very sharp slender spines, which thicken up with age. 1.00

5. **Murex aduncus,** Sow. Winged Murex. Japan. A small shell seldom over 2" with very prominent thin wings. Much desired. Usually a pale brown color. 1.00

6. **Murex cornutus,** Lam. African Horned Murex. West Africa. A dark brownish shell attaining 6" or more with fine curved horns. Fairly common if there were any collectors in the territory where they are found. But there is never enough of them on the market to supply the demand. 2.00

7. **Murex princeps,** Brod. Princess Murex. Gulf of California to Panama. A very fine species ranging from 2 to 4" with several rows of varices. The body whorls are well marked with rich deep reddish-brown bands. Not rare but the larger and older specimens are usually much eroded by enemies of all such mollusca. The medium sized shells are best. 1.50

8. **Murex elegans,** Beck. Lined Murex, West Indies. A handsome smooth species of 3" which must be uncommon as it is so rarely seen in collections in fine condition. If you make trips to the Bahamas, as so very many do now days, look for it and find out if possible where it is most often found. It much resembles the variety **motacella** from Senegal. 3.00

9. **Murex saxatilis,** L. African Murex. West Africa. One of the large fine forms of light brown color, ranging from 4 to 6". Must be fairly common as I can remember back 40 years ago when it was one of the most common species on the market but of recent years very few are seen. It has three bands which show inside the white aperture. 2.00

Beginning with plate 26 all the rest of the shells in this book are from foreign countries.

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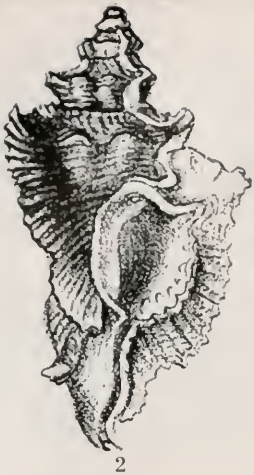
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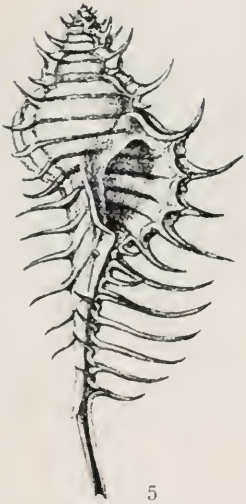
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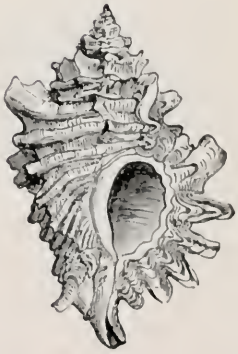
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PLATE 27

1. **Murex haustellum,** L. Snipe-bill Murex. Philippines. This is one of the very odd and curious forms of this great genus. There are over 400 varieties of Murex in the world and if you could see them all or even most of them, you would find some ever more curious than this one. It is 4 to 5", has high ridge back of aperture and spiral brown lines. 2.00

2. **Murex phlorator,** Ad. and Rve. Japan. This is an odd and uncommon winged shell which is not as large as the cut would indicate. Usually runs about 1¼" but may come a little larger. 1.00

3. **Murex torrefactus,** Sow. Philippines. There are a number of species of this type and they are usually some shade of brown. Most of them are fairly common in their range. They often require a great deal of work to prepare them for the cabinet, as all sorts of marine life love to use them as host. 3 to 4" 2.00

4. **Murex hexagonus,** Lam. Panama. This is a species of about 1 inch but it is a beauty. Most specimens I have seen contains more spines than are shown on this cut. There are similar forms, most of which live on rocky shores. 50c

5. **Murex occa,** Sow. China. One of the unique forms of the spiney Murex as the lined body and peculiar curved spine, make it easily recognized. Attains 4" and has faint brown bands. Not at all common in my lifetime but no telling what the future will bring forth. 2.50

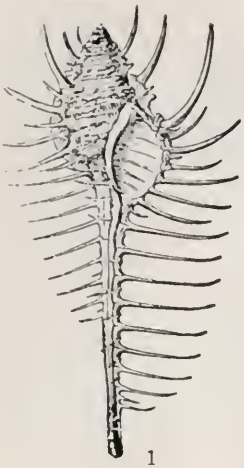
6. **Murex pliciferous,** Sow. Japan. A pure white species that ranges from 3 to 4" with short spines. Most of the Murex have a horny operculum. This specimen has one that perfectly fits the aperture. So many collectors fail to preserve this important part of the shell. 1.00

7. **Murex elongatus,** Lam. Fringed White Murex. China Seas. Usually attains 4 to 5" but may be found much larger as it resembles the very common White Murex. Brownish-white with frilled spines. 1.00

8. **Murex anguliferus,** Lam. Angular Murex. Red Sea. Usually 2 to 3" of a brownish color, with short stubby spines or none at all. There are a number of similar types. 1.00

9. **Murex adustus,** Lam. Black Asiatic Murex. Philippines. A small black shell with frilled edges that is fairly common in Sulu Sea and thereabouts. It must be thoroughly cleaned to bring out the rich color. 2 to 3" 1.00

10. **Murex erinaceous,** illustrated and described on another plate.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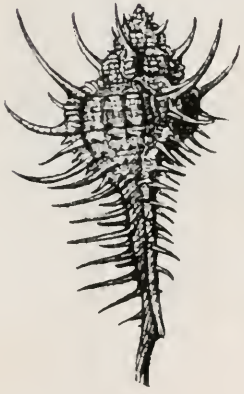
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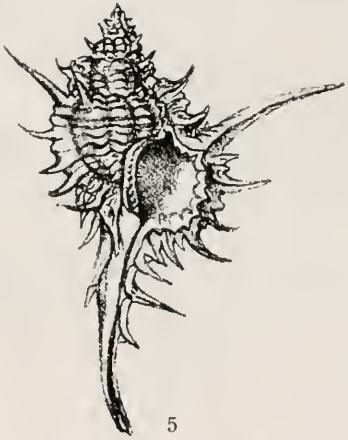
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PLATE 28

1. **Murex tenuispina,** Lam. Venus Comb. Philippines to Japan. It is not a rare shell these days, but not always easy to procure with all spines perfect. One of the daintiest of all Murices and much admired. Whitish 4 to 5". 2.00

2. **Murex plicatus,** Sow. Plicate Murex. Gulf of California. A handsome stubby species 2½" to 3", fairly common, and while fully ridged it is smooth to the touch. There are a number of similar forms. 1.00

3. **Murex brandaris,** L. Branded Murex. Naples. A very common species from a territory that has been inhabited for more than two thousand years by people who loved shells and who, in many cases, diefied them on their coins and pottery. 2 to 3" 75c

4. **Murex nigrospinosus,** Rve. Black-tipped Murex. Japan. Of a corneous color, usually attains 3 to 4" and the many sharp curved spines are tipped with dark color. This is the main distinguishing feature except its spiney pattern. 1.50

5. **Murex spinosus,** A.Ad. Banded Spiney Murex. Red Sea. This is one of several spiney forms which are not always very easy to classify. Usually each tropic sea has certain forms more common than elsewhere so that locality is often very important. The elongated spine on upper part of the aperture is a fairly good distinguishing mark. 3 to 4" 1.50

6. **Murex ternispina,** Lam. Chinese Murex. China coast. One of the many smaller forms of spiney Murex that range 3 to 4". The little prongs being short and sharp. Fairly common with bands of brown in fresh specimens. 1.25

7. **Murex martinianus,** Rve. Martins Murex. Japan. Quite similar to the preceding species with short sharp spines and usually about the same size. A draw of all the forms of Spiney Murex make an elaborate display. 3" 1.25

8. **Murex clavus,** Kien. Spike Murex. Philippines. A very rare shell that has brought as much as $40 in recent years for a 4" specimen. It is white, slender, three-sided with flaring aperture. I have had them from West coast of Luzon. Very rare.

9. **Murex triqueter,** Born. Philippines. Differs from most all other forms of the genus, as it is covered with smooth ridges. Ranges about 2". There are several smaller forms down to half inch of similar structure. 2.00

10. **Murex pinnatus,** Wood. China coast. A small triangular, 2" pure white form of remarkable dainty beauty. I know of no other species at all like it. Not at all rare but very few seem to come on the market, so that it is not an easy shell to procure. 2.00

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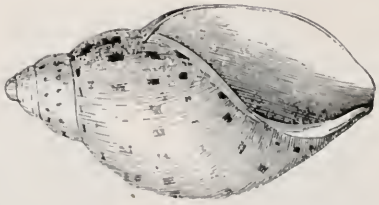

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PLATE 28

1. **Murex ramosus.** Lam. White Murex. Red Sea and nearby territory. It must be a very common species as forty years ago it was imported into this country in vast quantities and in all sizes from 3" to mammoth 8" specimens. It is pure white, although some specimens show traces of brown and I have seen fresh specimens with reddish apertures. 2.50 to 5.00

2. **Murex trunculus,** the Banded Murex is also illustrated and described on another plate.

3. **Murex brassica,** Lam. Banded Pink Murex. Gulf of California. Fairly common in this territory where fine large round shells range from 3 to 4" and I have seen perfect 8" specimens which are very rare. Aperture is pink with brown bands on the whorls. Found on the wide mud flats of that region and specially on rocky shores. 2.00

4. **Murex anatomica,** illustrated on another plate.

5. **Murex megacerus,** Sow. Found over much of Oceanica. It is a solid dark colored shell of about 3" but may come larger. There are other solid shells similar in same territory. 2.00

6. **Murex axicornis,** Lam. Small Horned Murex. Moluccas. The horns or spines of this little fellow are unusually long for the size of the shell and I consider it one of the daintiest species obtainable. There are so very many choice forms found in and around the hot Dutch East Indies. Of a reddish-brown color, about 2". 2.50

7. **Murex regius,** Wood. Rose Murex. Panama. A fine large species with rose colored aperture. It used to be a fairly common commercial shell and today is one of the most common forms of the Panama region also one of the largest. Usually 3 to 5". It requires plenty of hard work to remove all the many forms of sea growth that are quite sure to infest the little spaces between the nobby spines. 1.00

8. **Murex bicolor,** Val. Pink Murex. Panama. This species and the Rose abovementioned are both found at Panama but of late years it is not real common there. It has been found more common at points farther north on Mexican coast. The aperture is deep pink color in fresh specimens and the body whorl has the usual number of spiny knobs.
3 to 4" 1.00

9. **Murex salebrosa,** King. Mazatlan. to Panama. The Murex are divided into 19 sections or subgenera and this species comes under Vitularia. By arranging the family into sections as shown in recent monographs you will see a gradual graduation into allied genera. It lives under rocks and not very common anywhere. 2½" 2.00

10. **Halia priamus,** Meusch. Cadiz, Spain. A light brownish smooth shell. Slightly mottled, found in very deep water. It is quite rare. There seems to be no known affinity with other genera of marine shells. In the usual classification it is placed next to Cancellaria. 3". Very rare.

PLATE 29

1. **Conus magus,** L. Philippines. A rather common species ornamented with irregular chestnut markings on white. As it is found over a wide territory, about ten varieties have been named and some of them are very distinct from the type. 2 to 2½" 1.00

2. **Conus magus raphanus,** Hwass. Philippines. This is one of the many varieties mentioned above. The color pattern is quite different and can be easily separated from other forms. 2 to 2½" 1.00

3. **Conus gubernator,** Hwass. Mauritius. A fine light colored species 3 to 4" with light chestnut markings on a creamy white background. 1.50

4. **Conus achatinus,** Chem. The Agate Cone. Philippines. Light russet lines and wave markings of chestnut on white. Some specimens are all grayish-brown with light dots. Very variable shell. 2½" 1.50

5. **Conus ammiralis,** L. Philippines. A very handsome species usually covered with white tent-like markings and two bands. In the old days of the early 19th century it brought fabulous prices, as did many other species of this genus. 2 to 2½" 6.00

6. **Conus betulinus,** L. Singapore. A fine very heavy species of yellowish color, with well spaced rows of dark dots. Ranges up to 5". The smaller specimens are usually the finest colored. 1.00

7. **Conus mustellinus,** Hwass. Philippines. This species is richly ornamented with small spots and dashes of dark drab on light buff background. A fine 3" shell that is quite distinct. 1.00

8. **Conus arenatus,** Hwass. The Dotted Cone. Ceylon. This species is ornamented with hundreds of small dots, often arranged in waves. It is a handsome small chubby species, common to the Indian and Pacific Oceans. 1½" 50c

9. **Conus sieboldi,** Rve. Japan. Very distinct, rather slender and thin. Has only a few russet markings on white. The elevated spire is typical. Rather scarce but more common of recent years. 2" 1.50

10. **Conus auratus,** Lam. Ceylon. A noble shell ranging from 3" up with chestnut tent-like markings on white background. Somewhat resembles aulicus but never approaches that species in size. 3.00

11. **Conus nocturnus,** Hwass. Moluccas. The white blotches often tent-shaped on a black background, marks this as a dark shell. It is rather rare and few are ever seen on the market. There is a very fine variety called **deburghae,** from Java. Both are about 2½" and rare. 6.00

12. **Conus aurisiacus,** L. Moluccas. A rather rare shell with markings of bands of pink on white, ornamented with chestnut dots and dashes. Only occasionally offered and always at a high price. 15.00

13. **Conus aulicus,** L. South Seas. One of the finest and largest of the genus attaining 5 to 6". It is entirely covered with tent-like markings. 5.00

14. **Conus miles,** L. Philippines. A very common species with a broad brownish band on a lighter background. Also dark band at base. It has been sold in a commercial way for generations. 3" 1.00

15. **Conus mercator,** L. Senegal. A very distinct small species which is banded with waves of zigzag chestnut marks on a light buff ground. It is a rather rare shell and not often offered for sale. 2" 2.00

16. **Conus monile,** Hwass. South Seas. A very handsome widely distributed species. It has chestnut dots and splashes on creamy white with often light russet background. 2" 1.00

17. **Conus spectrum,** L. Mauritius. A distinct marked small shell. It has a wide aperture, rather thin edge. Light chestnut markings on white. 2" 1.00

18. **Conus crocatus,** Lam. Mauritius. This species has zigzag markings of dark brown on a lighter russel background with tent-like blotches of white. The cut does this rare shell scant justice as I have seen. 2½". Specimens bring $50.00.

19. **Conus rubiginosus,** Hwass. Mauritius. The white tent-like markings are on a russet background. There are other similar species which are hard to separate. A very handsome 2½" shell. 2.00

20. **Conus elisae,** Kien. Madagascar. One of the fine and rare small tent cones not often seen in cabinets. They inhabit coral reefs and good specimens are never seen on shore lines. It is a gem shell if you are successful in securing one. There is a species called Dalli found in deep water off Mexican coast to Panama which much resembles this form and quite as beautiful. 2".

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PLATE 30

1. **Conus textile,** L. Tent Cone, Philippines. A handsome shell entirely covered with wavy tent-like lines of dark chestnut on russet. The most widely distributed of the many species of Tent cones found through the Pacific and Indian Oceans. 3 to 4" 1.00

2 and 3. **Conus amadis,** Chem. Ceylon, Australia, etc. The chestnut markings almost cover the background of white. A fairly common species well distributed over a wide territory and various color forms will be found, likely due to different ecological conditions. 3" 1.50

4. **Conus aurantius,** Hwass. Philippines. This is one of the grand Conus and a good series of color forms is very rare. Specimens seen in many collections give a very faint idea of the great variety of color. It has very irregular markings of deep russet. My Philippine collectors have never sent this shell to me. 3" 2.50

5. **Conus geographus,** L. Ceylon to Philippines. A large 4 to 5" species with wide aperture. The body of the shell is thin as compared with other Conus and is mottled with reddish-brown. An outstanding species that should not be very hard to secure. 2.00

6. **Conus thalassiarchus,** Gray, Japan. This shell has faint irregular markings on a white background. It is a rare shell and always has the appearance of being over cleaned, but it just comes that way. 3" 5.00

7. **Conus zonatus,** Hwass. Andaman Ids. A brilliant dark shell ornamented with black markings on a white background. It is a rare species which may cost you a ten spot or more for a choice one. 3" 5.00

8. **Conus tulipa,** L. Philippines. A very distinct shell in both form and color. The wide aperture is somewhat similar to **geographus** but it is usually thicker and smaller. It is of pink color on white background with fine lines and dashes. 3" 1.00

9. **Conus lithoglyphus,** Meusch. Ceylon. The pure white markings on a reddish-russet background, makes this a very striking species. Always attracts attention by its bright colors. 2" 1.00

10. **Conus princeps lineolatus,** Val. Panama. There is a better illustration on Plate 9. Various collectors have sent me choice specimens from Guayamas, West Mexico, where it is fairly common. 1.00

11. **Conus telatus,** Rve. Mauritius. A very handsome shell of 2" and somewhat rare. It has longitudinal zigzag markings on a lighter bluish-black background. White tent-like blotches. The island of Mauritius, I believe, has more varieties of Conus to its credit than any other place in the ocean world. 5.00

12. **Conus abbas,** Brug. Ceylon. Entirely ornamented with light and dark chestnut. The tent-like markings show the white background. Very choice and rare. 2" 5.00

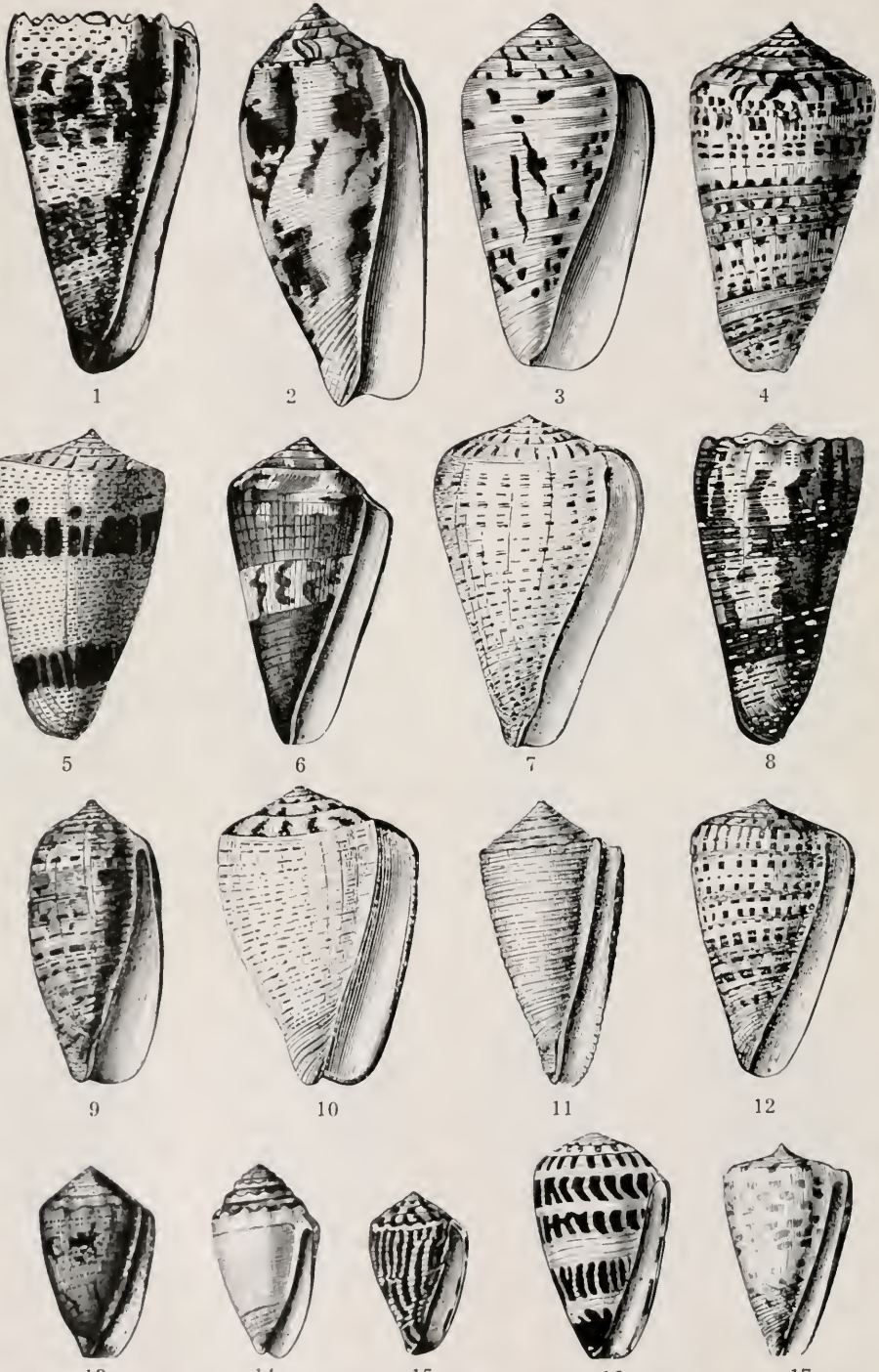

PLATE 31

1. **Conus imperialis,** L. Imperial Cone. Philippines. This species is found over a wide territory. It has yellowish-chestnut markings with black dashes on a white ground color. It is fairly common and one of the finest species. 2½" 2.00

2. **Conus striatus,** L. Striated Cone. Philippines. It has light russet lines, prominent splashes of color on a creamy-white background. A series of shells will run from light to very dark color. 3 to 4" 1.00

3. **Conus floccatus,** King. Itull Id. A very rare shell that is light purplish with longitudinal lines and revolving bands of chestnut. Only occasionally seen in cabinets. 2½" 15.00

4. **Conus siamensis,** Brug. Siam. A fine large solid shell. It has light russet markings in great profusion which almost completely obscure the white background. 2 to 4" 3.00

5. **Conus augur,** Hwass. Moluccas. This very distinct species is ornamented with fine russet dots which merge into two very distinct bands, like the milky way. 2" 2.00

6. **Conus vexillum,** Gmel. Java to Philippines. A fine large species 3½ to 4". The even yellowish color only shows a few patches of white with a regular design of yellow and white on apex. 1.00

7. **Conus suratensis,** Brug. China. This is a fine dotted shell 3" or more. It has chestnut markings on a yellowish-white background. The pattern of coloring is very distinct and beautiful. 2.50

8. **Conus imperialis fuscatus,** Born. Zanzibar. A splendid variety of the Imperial Cone. It has light russet markings on a grayish-white background. 2.00

9. **Conus bullatus,** L. New Caledonia. A medium size shell of 2 to 3" with large aperture which is typical of the species. It has reddish-russet markings on white background. Usual high natural polish, not seen in many other species of this genus. 6.00

10. **Conus glacus,** L. Moluccas. A very fine and distinct shell to which the cut hardly does justice. It has russet markings on a light brown background and cannot be confused with any other species. Dark blotches on apex. 2½" 2.50

11. **Conus sulcatus,** Hwass. China. A white shell completely covered with bold circular ridges. Differs from all other species. 2½" 2.00

12. **Conus papilionaceus,** Hwass. Gambia. A fine strong robust shell with russet markings in regular pattern on a white background. A really beautiful shell. 3" 5.00

13. **Conus minimus,** L. Mediterranean Sea. There are many Conus of about this size and they seem to breed in great confusion. A dark mottled shell with irregular splashes of color. 1" or a trifle larger. 50c

14. **Conus pontificalis,** Lam. Australia. A small 1" species of a drab color with fine lines and a very distinct apical structure not seen in other species. 1.00

15. **Conus hebraeus vermiculatus,** Lam. New Caledonia. This little fellow I call a variety of Hebraeus, as the pattern and size is the same except that the lines are thinner and many more of them. Dark lines on white background. 1" 50c

16. **Conus hebraeus,** L. Philippines. A neat little species similar to preceding with wider and heavier lines. 1¼" 50c

17. **Conus tessellatus,** Hwass. Ceylon. A brilliant shell adorned with light reddish markings on creamy-white background. 1½ to 2½" 1.50

PLATE 32

1. **Voluta magnifica,** Chem. Australia. One of the large shells of this genus ranging 5 to 6". It has dark chestnut wavy markings over a creamy background. Edge of outer whorl is thin. Markings arranged in four distinct bands. 10.00

2. **Voluta mamilla,** Gray. Tasmania. The largest shell of the genus averaging about 9" with wide open aperture like the Melo shells. Has a very large apical knob or embryonic shell. Chestnut markings on light buff. Shell rather thin for its size. One of my collectors dredges them in 5 to 20 fathoms, says most of the shells brought up are dead and have been inhabited by hermit crabs. A live shell is rare and costly. 25.00

3. **Voluta imperialis,** Lam. Philippines. Although found over a wide range, good specimens do not seem to be very common. It is a large shell of distinct form and well marked with brownish tent-like splashes. 6 to 8" but 2 to 3" specimens are very attractive. 5.00 to 10.00

4. **Voluta pacifica,** Sow. Philippines. A widely distributed species of which there are naturally good varieties. In the Australian region they have dredged similar forms which have new names. The shell is well marked with brownish splashes. 4 to 5" 2.50

5. **Voluta fusiformis,** Swain. Australia and Tasmania. A very fine 6 to 7" species, adorned with wavy, chestnut markings on a pale background. It is a smooth shell as are most of the species of this genus, very few being found with incrustations like most other marine shells. 5.00

6. **Voluta fulgetrum,** Swain. Australia and Tasmania. A noble species showing dark, wavy, chestnut markings on light yellowish-white. The apex is dark and knobby. The embryonic shells of this genus are always of great interest to serious collectors. 5" 7.50

7. **Voluta angulata,** Swain. Patagonia. Fairly common in shallow water in this very cold region. It is almost devoid of color, simply faint traces of russet. Those I received from Uruguay were covered with a thin coating of nacre as if they had been dipped in shellac. 5" 3.00

8. **Voluta harpa,** Barnes. Acapulco, Mexico. A small dark form, one of the smallest of the genus seldom over 1½". It has longitudinal ridges with three distinct bands of brownish color. 1.00

9. **Voluta vespertilio,** L. Bat Volute. East Indies generally. This species varies from brown to reddish with various patterns of mottled design. The shells may be entirely smooth or adorned with sharp spines, small knobs and all the variations between. Several distinct forms have been given varietal names. Most specimens run 2 to 3" but specimens have been found up to 5". The most common species of the genus, which is composed largely of rare shells. 50c

10. **Voluta musica,** Lam. Trinidad and other points on the East Americas. The Music Volute is a great favorite with collectors in that the pattern of coloring much resembles the bars of written music. There is a wide variation of this pattern from different localities. Usually 1½", but specimens have been found to 3". About six color varieties have been named. 2.50

11. **Voluta piperita,** Sow. New Georgia, Solomon Islands. A very handsome 3" shell adorned with reddish markings forming bands. Seems to be closely allied to the species called **ruckeri.** 3.00

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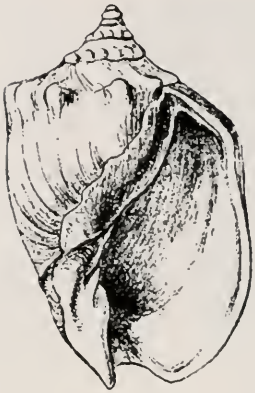

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PLATE 33

1. **Voluta festiva,** Lam. S. E. Africa, Natal Coast. One of the rarest of the genus. It is a rosy-white clouded with orange-red. I have never been able to secure a specimen of this shell, but there are many other Voluta few collectors have ever seen. Rare.

2. **Voluta ancilla,** Sow. Patagonia. A rather thin shell, devoid of color as is usual with shells living in such cold water. Most specimens that come to me show the effect of the turbulent seas, even to grinding the shell so thin, holes are found in perfectly fresh live specimens. 6" 3.00

3. **Voluta braziliana,** Sol. Brazil southward. Specimens sent me recently from Uruguay were covered with a reddish periostracum. All have wide apertures and are not a very attractive shell. I also had sent me the egg-sacs laid by this mollusc. They resemble gopher eggs of Florida about 2" diameter, soft, translucent, and those that were developed showed about a dozen embryos in the one sac. Preserved in formaldehyde they are a very interesting curio for the shell den. 3 to 4" 3.00

4. **Voluta prevostiana,** Crosse. Japan. A slender form, thin and attains 7 or 8". Large specimens show only faint traces of color, usually reddish-brown. The Japs are great shell collectors but they do not find many of this shell. 5.00

5. **Voluta vexillum,** Chem. Ceylon. A very striking shell with its regular bands and reddish markings on a white background. About 2½", is one of the finest of the region and not all are rare. 3.00

6. **Voluta undulata,** Lam. So. Australia. A fairly common shell much admired for its zigzag markings of wavy lines. My collector finds them burrowing in sand in shallow water. Usually 3". 2.50

7. **Voluta papillosa,** Swain. South Australia, deep water. A fine robust shell, usually lightly mottled with chestnut. Only occasionally seen in collections. I suspect it lives in rather deep water like a number of forms of this genus. 5" 7.50

8. **Voluta bullata,** Swain. South Africa. A rather small shell and of curious form for this genus. It has a wide aperture and shows only faint markings of brown on a buff background. Live collected shells are rather scarce in collections. 2½" 5.00

9. **Voluta cymbiola,** Chem. Moluccas. It is a very rare shell and only occasionally seen. About 2½". Diffused blotches on a whitish background. **Voluta sophiae,** Gray from West Australia is somewhat similar and equally rare.

10. **Voluta ruckeri,** Crosse. New Georgia, Solomon Islands. A richly colored shell with its reddish markings which always attracts attention. It has deep blotches on a creamy-white background. My collector in these islands writes me the natives only occasionally find a nice specimen. 3 to 4" 4.00

11. **Voluta elliotti,** Sow. Northwest Australia. A beautiful shell with chestnut, wavy lines on a creamy background. It has a fine smooth polished surface and doubtless comes from deep water. There is another species similarly marked called **Turneri, Gray** from the Australian region, but it is very much rarer than this shell. 2½ to 3" 5.00

12. **Voluta gatliffi,** Sow. Port Keats, No. Australia, named for a prominent collector in that continent. A very fine and rare shell of which I have not seen over six specimens in fifty years. Few collectors have ever been able to procure one and yet is liable to turn up on the market at any time. It has chestnut markings arranged in oblong squares on a creamy or buff background. Smooth 3½". Rare.

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PLATE 34

1. **Voluta undulata angasi,** Sow. Port Lincoln, Australia. This species is similar to type but is adorned with a reddish background. In other respects it is about the same. 3" 2.50

2. **Voluta maculata,** Swain. Queensland, Australia. This is a rich smooth shell mottled with light chestnut, which is more dense in two distinct bands in the middle of the last whorl. It has a very brilliant natural polish. 2½ to 3½" 6.00

3. **Voluta mitraeformis,** Lam. South Australia. A small but pretty shell of light and dark brownish markings, with ridges the length of the shell. It comes from deep water and not very common. 2" 2.50

4. **Voluta delessertiana,** Petit. Madagascar, north coast. A small 2" shell with deep reddish ridges and faint white markings and lines. It belongs to the section **Lyria** all the species of which are similar in form. 2.50

5. **Voluta lyraeformis,** Brod. East Africa. A small 2" slender shell with fine ridges and bands of white and brown. Rather rare and not often seen. 2.50

6. **Voluta scapha,** Gmel. Singapore on reefs. One of the most common shells of the genus to be shipped into this country commercially. It was always seen in curio stores and now is seen generally in real old homes. It has a natural polish, adorned with various patterns of brown markings and ranged from 2" to 5". 1.00

7. **Voluta hebraea,** L. Brazil to West Africa. A very fine and variable shell, somewhat allied to **musica.** The brownish patterns are very attractive. As it is not rare where found, one should have several specimens with as different pattern as possible. 5.00

8. **Voluta caroli,** Ire. Queensland, Australia. A shining, fulvous shell, with transverse bands of chestnut. Rare 2". 6.00

9. **Voluta zebra,** Lam. Zebra Volute. East Coast. A small 2" form well marked with regular chestnut stripes on a creamy background. There is a variety quite similar called **lineata, Leach.** From Tasmania. 2.00

10. **Melo diadema,** Lam. Indian Ocean. One of the largest of the 22 species in the genus. The natives call it a Bailer Shell, as they always carry one in their boats to bail out the water. Natives usually have a big one to carry water for domestic use. I have seen specimens that would hold a full pail of water. The Melos are ovoviviparous. Yellowish color with chestnut stripes. 6 to 10" 3.00 to 10.00

11. **Melo aethiopicum,** L. Australia. Another Bailer of a yellowish color with very large aperture. This species is usually 6 to 8" but may grow larger. 3.00 to 10.00

12. **Melo regia,** Schubert. Indian Ocean. One of the rarest of the Melo's and not often seen in collections. About 4". Another species quite as pretty and of about same size is **broderipi,** Gray. Rare.

13. **Melo indicum,** Gmel. Singapore. In this species the apex of the shell is simply a crown showing the gradual divergence of the genus to the section which for generations has been called **Cymbium.** There are splashes of brown color on a yellowish background but specimens are often unmarked. 6 to 10" 3.00 to 10.00

14. **Melongena paradisiaca,** Mart. Red Sea. A small 2" shell, smooth and somewhat colored with yellowish shades. Very faintly resembles the Florida form that is occasionally found free from the spines on the crown. There are about 33 species of Melongena in the world and they vary greatly in form. 50c

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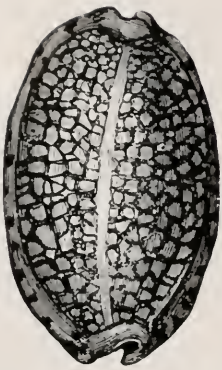

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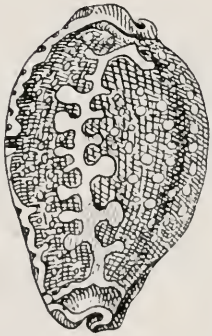

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PLATE 35

1. **Cypraea tigris,** L. The Tiger Cowry. All over the Pacific. A large fine shell which varies greatly in spotted pattern and also in color. There are forms with a yellow, whitish and reddish background but usually rare. You will also see in old collections specimens with Lords Prayer on back or Souvenir of some place. You will find specimens in almost every store in the world where shells are sold. Like all other Cypraea some forms have no spots and these are usually immature. 3 to 3½" 50c

2. **Cypraea arabica reticulata,** Mart. The Reticulated Cowry. Fairly common in Hawaii and Pacific generally. The white markings of the back are typical, the flaring base with black spots and dark splash of color in middle of base. There is a variety **histrio** that is somewhat similar but the base is more narrow and pure white with no blotch. The spots on top are more distinct. 2 to 2½" 1.00

3. **Cypraea umbilicata,** Sow. South Australia and Tasmania. Usually dredged in 10 fathoms or more. A fine large shell of yellowish pattern, with a slight hollow in umbilical region. Has always been considered rather rare. 3 to 3½" 5.00

4. **Cypraea testudinaria,** L. Madagascar, East Africa and other parts of Pacific. I have had numerous specimens from Japan area. Of a peculiar dark pattern, covered with minute white dots that look like dust. For this reason the shell is never as brilliant as other forms. No other Cypraea has a similar appearance. 3 to 5" 2.00

5. **Cypraea arabica,** L. Arabian Cowry. Pacific. Base and sides are often brilliantly spotted and back is lined with brown on bluish background. Very common. 2" 50c

6. **Cypraea mappa,** L. Map Cowry. Philippines and likely all over the Pacific. It is a fairly common shell with a brilliant design on back, the cut showing white patches where the two edges of the mantle of the mollusk meet. This type shell always has white base. The above two varieties are rather scarce also a variety that is richly adorned with red. 2½" 2.00

7. **Cypraea leucostoma,** Gray. Persian Gulf. Of a grayish color with faint chestnut markings. The pattern of the top differs from all other shells I have seen. A fairly rare shell which brings a good price. Rare.

8. **Cypraea caurica,** Pacific. Back is light brown, edge mottled, teeth ridged. Very common. 1½" 25c

9. **Cypraea mauritiana,** L. Mourning Cowry. Mauritius and elsewhere. Of a rich dark color, there is much variety of pattern, some specimens being almost black. The immature shell is likely to be rich brown with no pattern whatever, the teeth will also be immature and only show slightly. 2 to 4" 1.00

10. **Cypraea talpa,** L. Mole Cowry. Philippines and elsewhere in both Pacific and Indian Oceans. A brilliant shell when first collected as are most all of this genus and they fade if constantly exposed to light. Of a rich varying shade of brown with distinct bands. 2 to 3" 1.00

11. **Cypraea isabella,** L. Pacific generally. Of a grayish color with reddish tips. There is a variety **controversa** from New Caledonia and a variety **Limpida,** Melv. from Hawaii. Also a variety **Mexicana,** Stearns. from West Mexico. There is little difference in the three mainly shades of color, doubtless due to different temperatures of water and feeding conditions. 1 to 2".

12. **Cypraea pantherina,** Sol. The Panther Cowry. Indian Ocean, Red Sea and elsewhere. A very brilliant spotted shell of which the cut only gives a faint idea. There is a variety **albonitens, Melv.** from Persian Gulf that is of a reddish color, a variety **obtusa, Perry.** from Mauritius that is somewhat similar, a variety **therica** which is illustrated on another plate and variety **Syringa, Melv.** Red Sea that is almost all white. A large series of this shell from many localities is always desirable. 2 to 2½".

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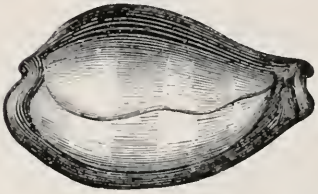

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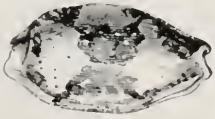

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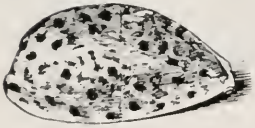

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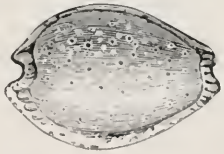

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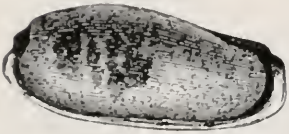

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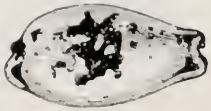

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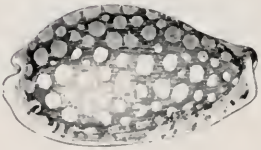

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PLATE 36

1. **Cypraea scotti,** Brod. West Australia. A finely spotted glistening shell of the form of cut. It is quite rare and readily brings $10.00 and up.

2. **Cypraea vitellus,** L. Calf Cowry. Pacific generally. It is of a light shade of brown with white spots. 1 to 2" 25 to 50c

3. **Cypraea argus,** L. Eyed Cowry. Pacific and Indian Oceans. The eyes are arranged in many patterns but sometimes diffused. Not common. 3" 2.00

4. **Cypraea onyx,** L. Onyx Cowry. Pacific generally. A brilliant blackish-brown shell bordered with white and two indistinct bands. 1½" 1.50

5. **Cypraea stolida,** L. Ceylon. A handsome bluish-gray species with brilliant darker markings. There are fine varieties. 1¼" 1.00

6. **Cypraea scurra,** L. Mouse Cowry. Pacific generally. The back is mottled with white spots on a light brownish background, base covered with dark spots. 2" 1.00

7. **Cypraea moneta,** L. Money Cowry. Pacific generally. A yellowish shell of the form of cut but there are several varieties of different shape. Very common everywhere. 1" 25c

8. **Cypraea lynx,** L. Lynx Cowry. Pacific generally. Base white, balance of shell richly spotted. 1¼ to 2" 25c

9. **Cypraea ocellata,** L. Ocellated Cowry. Ceylon. Its yellowish surface is completely covered with white and brown spots. Base spotted. 1" 50c

10. **Cypraea tessellata,** Swain. Hawaii. A deep water shell quite scarce. The four splashes of dark color always identify it. 1¼" 2.00 to 5.00

11. **Cypraea cylindrica,** Born. Philippines. The base is flesh color, top is mottled with bluish-gray with few blotches of darker color. 1¼" 1.00

12. **Cypraea caput-serpentis,** L. Snakehead Cowry. Pacific generally. The shell is of a light brown color and back has numerous white blotches. 1¼" 25c

13. **Cypraea cruentata,** Gmel. Indian Ocean. The upper surface is of a light shade of yellow and brown. The sides of the base have pink spots. 1¼" 50c

14. **Cypraea undata,** L. Indian Ocean. The two rows of zigzag markings across the back are sure identification. Attractive. 1¼" 75c

15. **Cypraea subviridis,** Rve. Australia. The shell is bluish-white, with speckle of brown and darker color on back. Base is rounded, fleshy. 1¼" 1.00

16. **Cypraea cribraria,** L. Indian Ocean. Base white, sides and top yellow, covered with small round white spots. 1" 1.00

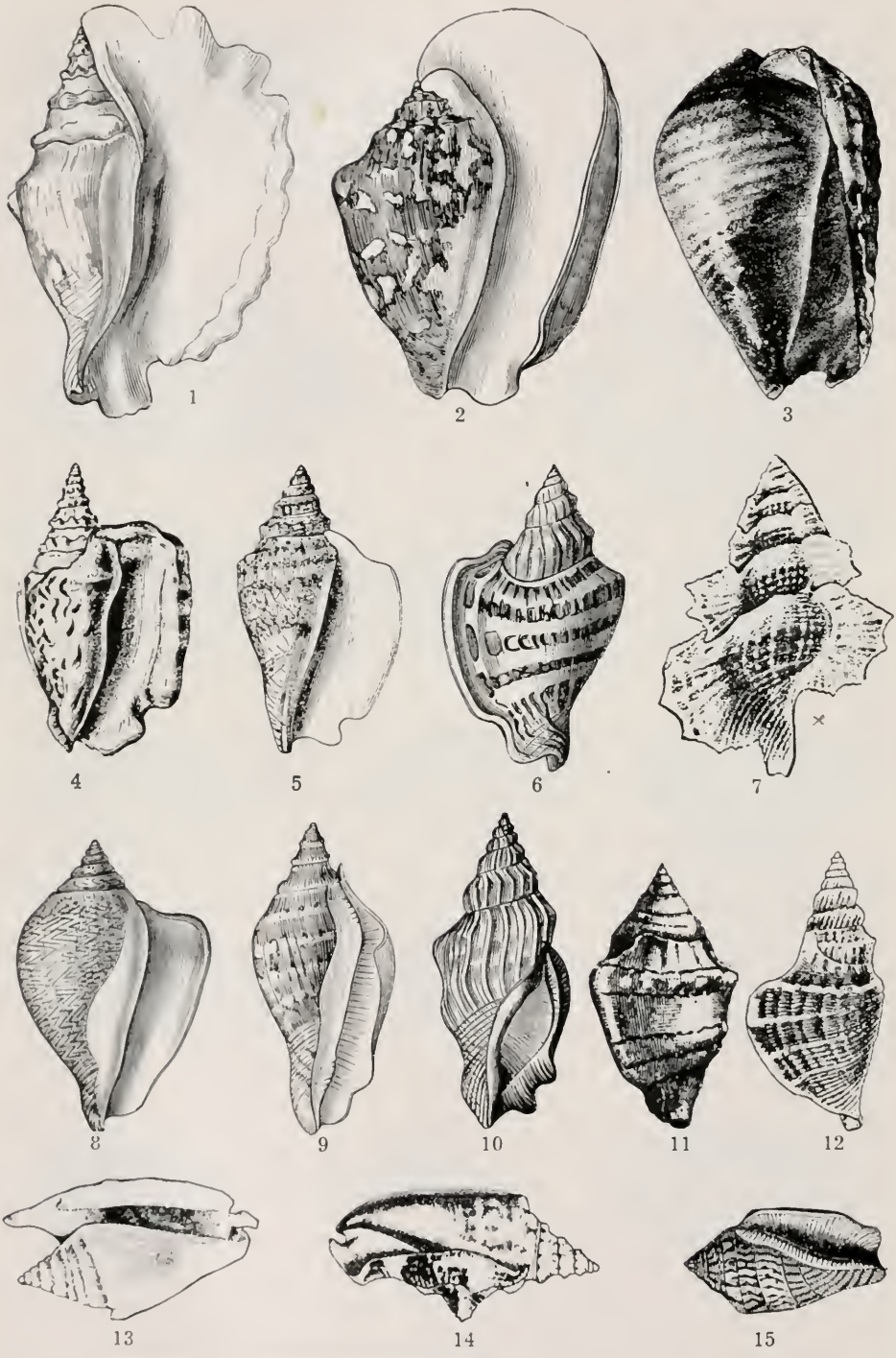

PLATE 37

1. **Strombus laciniatus,** Chem. Philippines. A very strange formed shell as the aperture which is richly colored with reddish-purple, extends to the top of the spire. A strong solid species which is rare and choice. 3½ to 4" 5.00

2. **Strombus latissimus,** L. Philippines and Pacific generally. A real solid and heavy shell and which attains 7". The aperture extends outward and inward, and a full inch above the spire. Has chestnut stripes on body whorl. I have also had specimens sent me from Fiji and other Oceanica islands. Rather rare. 6.00

3. **Strombus galeatus,** Sow. West Mexico. This is the Big Conch of the Mexico-Pacific region and takes the place of the Big Conch of the Bahamas. Has heavy periostracum which when removed shows a plain white shell on back and just a shade of russet in the aperture. Lives just below the tides and pushes around in the mud everywhere. Fairly common in some localities. 8" 2.00

4. **Strombus thersites,** Gray. Australia. It has tall spire, back ornamented with reddish blotches. Is 5" with the thick lip. Very distinct from all other species and a rather rare shell. 5.00

5 & 6. **Strombus variabilis,** Swain. Australia. It is well named as it is very variable. You can hardly find specimens from two localities that are exactly alike. I illustrate two types and there are many more. 1½" 50c

7. **Ranella pulchra,** Gray. Winged Ranella. China Seas. Of a slight buff color, the wings are exactly opposite sides of the shell. It is very distinct from other species and is not rare. 2" 1.00

8. **Strombus canarium,** L. New Caledonia. A fat chunked species with thick white lip and faint markings. A few similar types are found all over the Pacific. ½ to 2" and fairly common. 50c

9. **Strombus succinctus,** L. Philippines. The back of the shell is covered with yellow coating, ornamented with chevron white markings. Lip is sharp and aperture very distinct from other species. ½" 50c

10. **Strombus minimus,** L. Viti Islands. A very variable and handsome small shell which extends over a wide territory. You will find many types quite similar around the Pacific islands. All of the small Strombus make fine cabinet specimens, and look best in series of 4 to 6 specimens of a kind. 1½" 50c

11. **Strombus fasciata,** Born. Indian Ocean. Has a row of nodules at top of body whorl which is ornamented with five heavy black lines. Aperture is usually brilliant orange. 1½" 50c

12. **Strombus Campbelli,** Gray. Port Darwin, Australia. A fine small 2" species which is quite distinct in color pattern, being ornamented with chestnut markings. There are over a hundred species of Strombus in the world which range from the giant S. goliath from Pernambuco, Brazil which is very rare, to the small one inch forms. This chap is about 1½". 50c

13. **Strombus auris-dianae,** L. Philippines. The lip rolls over showing up the rich reddish aperture to fine advantage. The shell is quite smooth and glossy but there are varieties which are not so. Much more attractive than the cut would indicate. 2½" 50c

14. **Strombus granulatus,** Gray. Panama. A common form from Lower California southward. If you love to collect shells, secure a good boat and helpers and cruise over a thousand miles of this shore making frequent stops and you will be surprised at the collections it is possible to make. A friend of mine has been doing this for years, keeping careful notes on every species and the pamphlets he has published are very fascinating. Go thou and do likewise if you need a real rest. 50c

15. **Strombus floridus,** Lam. Philippines. I never knew why this name was applied to a shell not found in Florida. It is a small species which must be very common over a wide territory as it is sent to this country in quantity and used in manufacturing novelties. Very variable in color. 1" 25c

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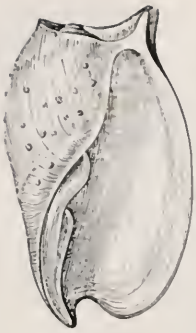

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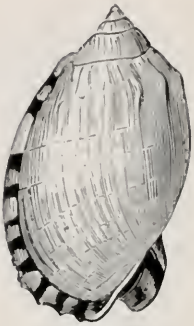

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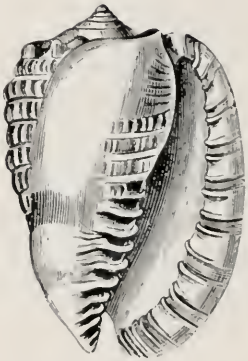

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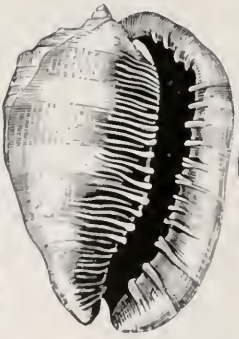

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PLATE 38

1. **Cymbium proboscidale,** Lam. West Africa. Most of this section of the Melo family are from this region. This species is usually 6 to 8″ but in the American Museum in New York there is a specimen easily 14″. I suspect the largest known. All are of a horn color. 4.00

2. **Cymbium porcinum,** Lam. West Africa. Most specimens seen in collections are 3 to 4″ but it really attains a much larger size. It has the peculiar concave apex and is of a grayish color. 2.00

3. **Cassis pyrum,** Lam. Mauritius. A small round species of 2″ with smooth surface inclined to reddish-brown color. Closely allied to **Achatina** which comes from the Cape Verde Islands. 75c

4. **Cassis vibex,** L. Mediterranean Sea but it has a very wide range. There is a good named, variety from the Philippines and shells of a similar form and color are found in all oceans. It is elongated, smooth 2 to 3″, not very heavy, but has a brilliant polish and striking coloring. The lip is ornamented with regular black stripes. The variety is similarly marked but more stubby and smaller. 50c

5. **Cassis strigata,** Gmel. Philippines. The Striped Cassis attains 3 to 4″. The dark parallel stripes are more prominent on some shells than others but always well defined. It is a strong robust species. 1.00

6. **Cassis cornuta,** L. Mauritius. The Yellow Helmet is one of the Three largest Cassis of the world, the two others being West India shells. For generations this shell was shipped into our country and sold commercially in shell stores but of recent years few have been sent. It is a big attractive yellow shell 10″ or more in size and you often see them in very old homes, brought here in the 18th and 19th centuries in sailing ships as part of their ballast. 5.00

7. **Cassis tenuis,** Say. Galapagos Islands. A thin 3½″ shell very similar in markings to the Cameo Shell. The reflexed lip is strongly marked with splashes of black, arranged in pairs. It lives on mud flats and deep water, fairly rare. 2.50

8. **Cassis coarctata,** Gray. West Mexico. At first sight it resembles the common Cameo Shell but it is more elongated and thinner. The color pattern is similar. I suspect it could not be used for carving Cameos as is the Indian Ocean form. 4″ 2.00

9. **Cassis rufa,** L. Zanzibar and East Africa. The Bullmouth or Cameo Shell has been an article of commerce for a long time. Immense quantities are collected, shipped to points in Italy where they are carved in exquisite designs. Most of the carvings are exact copies of famous paintings in their local museums. The large 6″ shells are often completely carved, an electric light inserted and used for mantle lamps when they command a fairly high price. The shell is of reddish color and matures from 3 to 6″ 1.00 to 5.00

10. **Cassis glauca,** L. Philippines. Of a grayish color with strong reflexed lip and small points near the base of the aperture. Usually 3 to 4″, smooth, it makes a fine cabinet specimen. 1.00

11. **Cassis turgida,** Rve. Mindanao, P. I. The zigzag markings of this 2½″ shell usually differentiates it from most other species. It is closely allied to vibex, also shown on this plate. 1.00

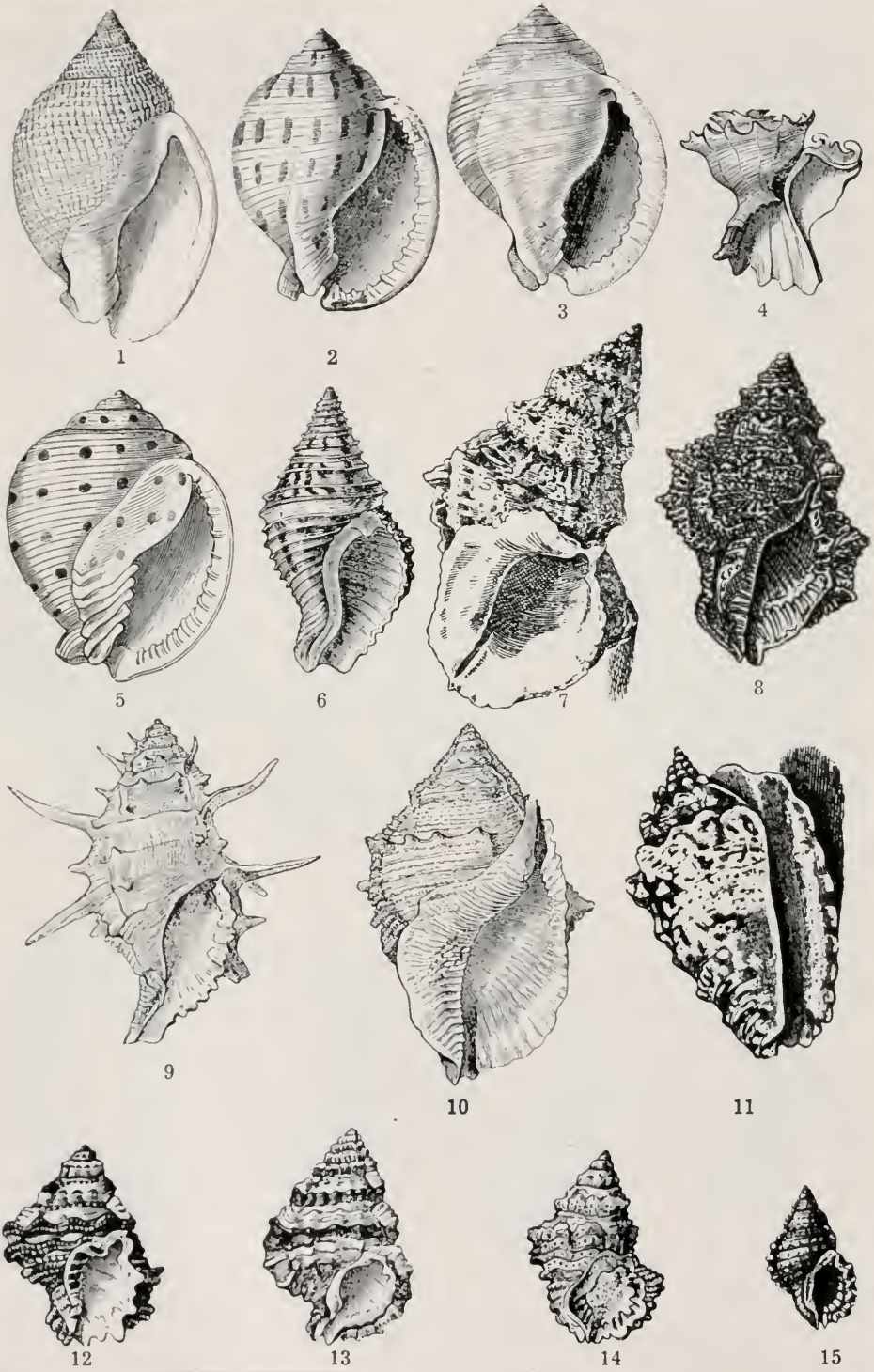


PLATE 39

1. **Cassis semigranosa,** Wood. Victoria, Australia. More elongated than most of the many species of this genus and completely covered with fine reticulations that add to its attractiveness. 2" 75c

2. **Cassis canaliculata,** Brug. Philippines. Shells of this type with regular blotches and usually 2 to 3" seem to be found in all oceans and usually fairly common. One could easily form an entire draw of them. This species has more elongated spire than some of the others. 50c

3. **Cassis saburon,** Ads. Mediterranean Sea. A round neat shell covered with faint blotches in regular patterns. Fairly common in the whole region. 2" 50c

4. **Latiaxis mawae,** Gray. China Sea. Pure white 1 by 1½". It has a flat apex, last whorl partly disconnected. Umbilical region open to end of whorl. Last whorl has curved frills. The other species from this region have elevated spires, pure white and real little Pagoda-like form, often ornamented with curved spines. They are a fascinating group and often quite rare as is this species. 15.00

5. **Cassis bisulcata,** Schub. Philippines. A small round 1½ to 2" shell with granular surface and dots of chestnut in regular pattern over the surface. 75c

6. **Fasciolaria fusiformis,** Val. New Holland, Oceanica. A small 1½" shell with several ridges and row of small spiny points around middle of whorl. Of a light brownish color. 1½" 75c

7. **Ranella lampas,** Lam. Pacific everywhere. The Frog Shell as it is often called, attains 8" and is usually white when well cleaned. Small shells have a reddish aperture. It is the largest species of the genus and has been sold commercially in shell stores for many years. 50c to 3.00

8. **Ranella albivaricosa,** Rve. Philippines. A fine white variety with chestnut markings, the surface completely covered with small and large points. Typical of about 85 species of the genus found all over the world. They are scattered here and there over all oceans. 3" 75c

9. **Ranella spinosa,** Lam. China Seas. Ranges from 2 to 3" ornamented with spines and nodules of various length. It is the only species so ornamented and not very common anywhere. 2.00

10. **Ranella crumena,** Lam. Ceylon. The aperture of this shell is the distinguishing feature, as it is usually orange color and well developed. The body is covered with chestnut blotches. Lives under rocks at low tide and is a rather attractive species. 1½ to 3" 2.00

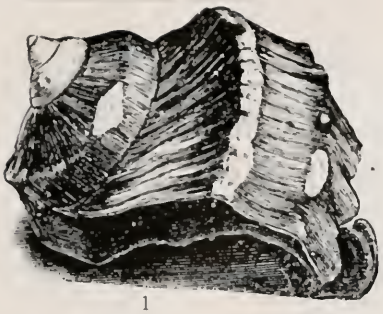
11. **Strombus lentiginosa,** L. Silver Lip. Philippines and Pacific generally. The shell is mostly white and covered with small knobs. Surface always irregular. It has been sold in a commercial way for generations. 3" 50c

12. **Ranella bufonia,** Gmel. Philippines. A handsome small form of 1½ to 2". Highly ornamented with knobs, and well marked with reddish-brown band. Aperture has a dash of red. A very difficult shell to clean satisfactorily. 50c

13. **Ranella gyrina,** Lam. Australia. It has a wide russet band in middle of each whorl and is a rather bright colored shell that is quite variable. 1 to 1½" 50c

14. **Ranella rhodostoma,** Sow. Cape Verde Islands. A neat small species that will attract attention in any cabinet, on account of its crumpled, knobby appearance and fairly bright color. It has a dark aperture. 1½" 50c

15. **Ranella granifera,** Lam. Philippines. The rows of small knobs are quite typical of a number of other similar shells in form. It is fairly common over a wide territory. 1½" 50c



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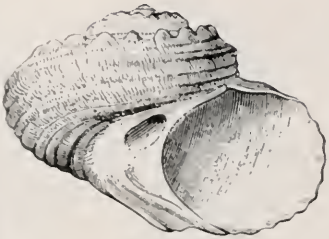

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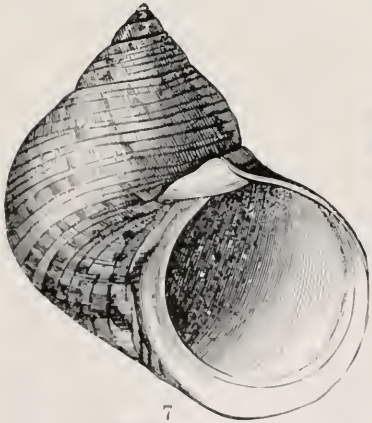

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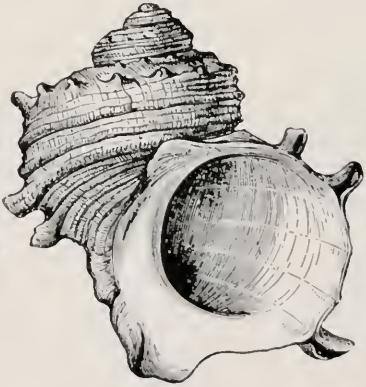

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PLATE 40

1. **Turbo marmoratus,** L. China and many other places in Pacific — Called Green or Pearl Snail. The natural color is green but this is often ground off down to the pearl which takes a very brilliant polish. Curio dealers have the prominent ridges ground down to the pearl when you have a green shell with silver pearl stripes. Has been a commercial shell for generations and still fished extensively for its pearl.
3 to 8" 1.00 to 6.00

2. **Turbo torquatus,** Gmel. New Holland, Oceanica. A very distinct species which I have never found very common and seldom see in cabinets. Much the same form as the very common **sarmaticus** but has the row of ridges on top of the body whorl, open umbilicus and light aperture. 2 to 3" 1.50

3. This is a typical shelly operculum which is found in all Turbos but in some species like petholatus, this operculum has a brilliant green polish. These operculums on the big Turbos will be 3 to 4" and 1" thick. Sailors call them Cats eyes.

4. **Turbo petholatus,** L. Philippines and Pacific generally. This shell has a very high natural polish. It is very richly ornamented with different shades of black, green and brown. Some shells will be all one shade. I had a very distinct variety all gray patterns from Sula Sea and I suspect from many other island groups different patterns could be obtained. Those sent me from the British Solomons were quite distinct and very rich in color. Has bright green operculum. 2 to 3" 1.00

5. **Turbo argyrostoma,** L. Pacific Generally. The Silvermouth is named for the brilliant silver aperture. The back is ridged and varies from gray to greenish, with stripes of brown and white. When polished it is all pearl.
2½" 50c

6. **Turbo saxosus,** Wood. Panama. It is covered with ridges which are cut into tiny segments like ruffles. There is a thick periostracum which if removed shows the pearl. Lives under stones between tides. Of a grayish color.
1½ to 2" 50c

7. **Turbo imperialis,** Gmel. Imperial Turbo, Indian Ocean. A round greenish shell, smooth surface and fine pattern. Very attractive. 4 to 6" 3.00

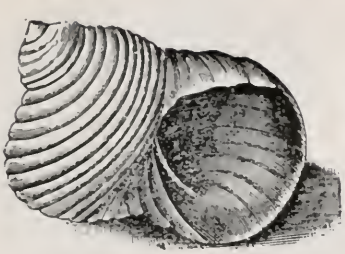
8. **Turbo cornutus,** Gmel. Japan Seas. The Spiney Turbo is a large shell with numerous horns. The aperture as usual has a heavy operculum. Color is green. If polished it is a brilliant pearl but is not as thick a shell as **marmoratus** and is seldom fished for commercial purposes. 4 to 5" 2.00

9. **Turbo ticaonicus,** Rve. Philippines. A handsome shell and very variable. Usual color is green, the whorls being lined with minute pebbly surface. Many specimens are spotted with white. 2" 50c

10. **Turbo natalensis,** Rve. South Africa. The surface is covered with mottled ridges and rich russet color, which makes it a rather attractive small shell. 1½" 50c

11. **Turbo lamellosus,** Brod. Australia. A very depressed shell completely covered with wrinkles. Very little color. A shell which is very rarely sent me by Australian collectors and I suspect is not very common. 2" 1.50

12. **Turbo stramineus,** Mart. South Australia. One of the odd forms of the genus. Rather flat with ridges and pebbled surface and light aperture. Quite distinct shell. 2 to 3" 1.50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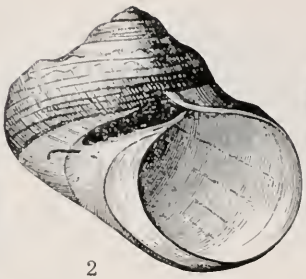
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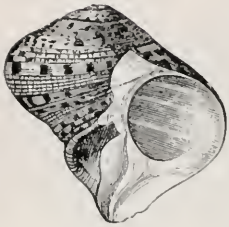
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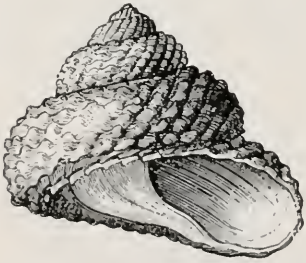
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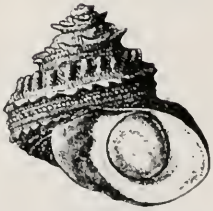
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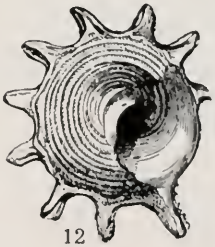
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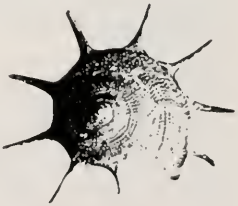
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PLATE 41

1. **Turbo chrysostoma,** L. Goldmouth. Philippines. The aperture is a rich golden color which gives it its name. The surface is covered with regular ridges which show greenish color. Ground down to the pearl it used to be sold as a pearl shell. 2 to 2½" 50c

2. **Turbo sarmaticus,** Gmel. Turks Cap. Algoa Bay, Africa. A shell that must be very common as it used to be sold polished commercially in vast quantities. It is of a black color and when polished some of the black was usually left on, to make a striking contrast with the pearl surface. 3" 50c to 1.00

3. **Turbo fluctuosus,** Wood. Lower California. The species is well marked with wavy diagonal stripes and lives among stones between tides. Is 2½". 50c

4. **Turbo smaragdus,** Gmel. New Zealand. It is of greenish color with a rich deep green shelly operculum. Aperture is pearl as usual. 2 to 3" 50c

5. **Turbo lugubris,** Rve. New Holland. A finely mottled greenish shell of peculiar shape. Smooth surface. 2" 50c

6. **Turbo intercostalis,** Mke. Hawaii. It is a finely marked shell of about 2". Ridged surface and brownish color. There are a number of quite similar forms in the Pacific. 2 to 3" 75c

7. **Turbo setosus,** Gmel. Moluccas. A very variable shell always covered with ridges and small nodules but a wide variety of color patterns. Varies from black diagonal stripes to yellow background with brown stripes and some specimens entirely brown. 2 " 75c

8. **Turbo radiatus,** Gmel. New Caledonia. A richly colored shell with small tubercles and adorned with broad longitudinal stripes of reddish-brown. The aperture is golden pearl. 1½ to 2" 75c

9. **Astraea sulcatum,** Mart. New Zealand. A strong solid shell 2½ to 3" covered with ridges and has strong periostracum. Of a grayish color it is of fine iridescent pearl when the periostracum is removed. 1.00

10. **Astraea modestum,** Rve. Japan Seas. A richly colored pink shell with two rows of spines on each whorl. It has a large orange patch on the smooth base at edge of lip. 2 to 2½" 1.00

11. **Astraea inermis,** Gmel. West Indies. Last whorl is carinated with only a suggestion of spines. It is close to other species of the region but always distinct. Lives among coral rocks. 2" 1.00

12. **Astraea calcar,** L. Philippines. A small shell devoid of color with row of spines on the carinated edge of last whorl. 1½" 50c

13. **Astraea triumphans,** Phil. Japan Seas. It is quite unusual to see a reddish shell with a row of sharp spines as long as these on the carination of the last whorl. It has a dainty operculum that fits the curious aperture. Not rare. 2½" 1.00

14. **Astraea buschi,** Phil. Gulf of California. It is of a greenish color when periostracum is removed. Serrated edge on base of last whorl. Has ear shaped operculum of white. 1½" 50c

15. **Astraea fimbriatum,** Lam. Victoria, Australia. Very much resembles some of the forms from the West Indies. Is of a light greenish color with pearl beneath. 2" 50c

16. **Astraea stellare,** Gmel. New Caledonia. A very unique shell with spines on edge of whorls and a rich yellow aperture. Quite distinct from other species. 1½" 75c

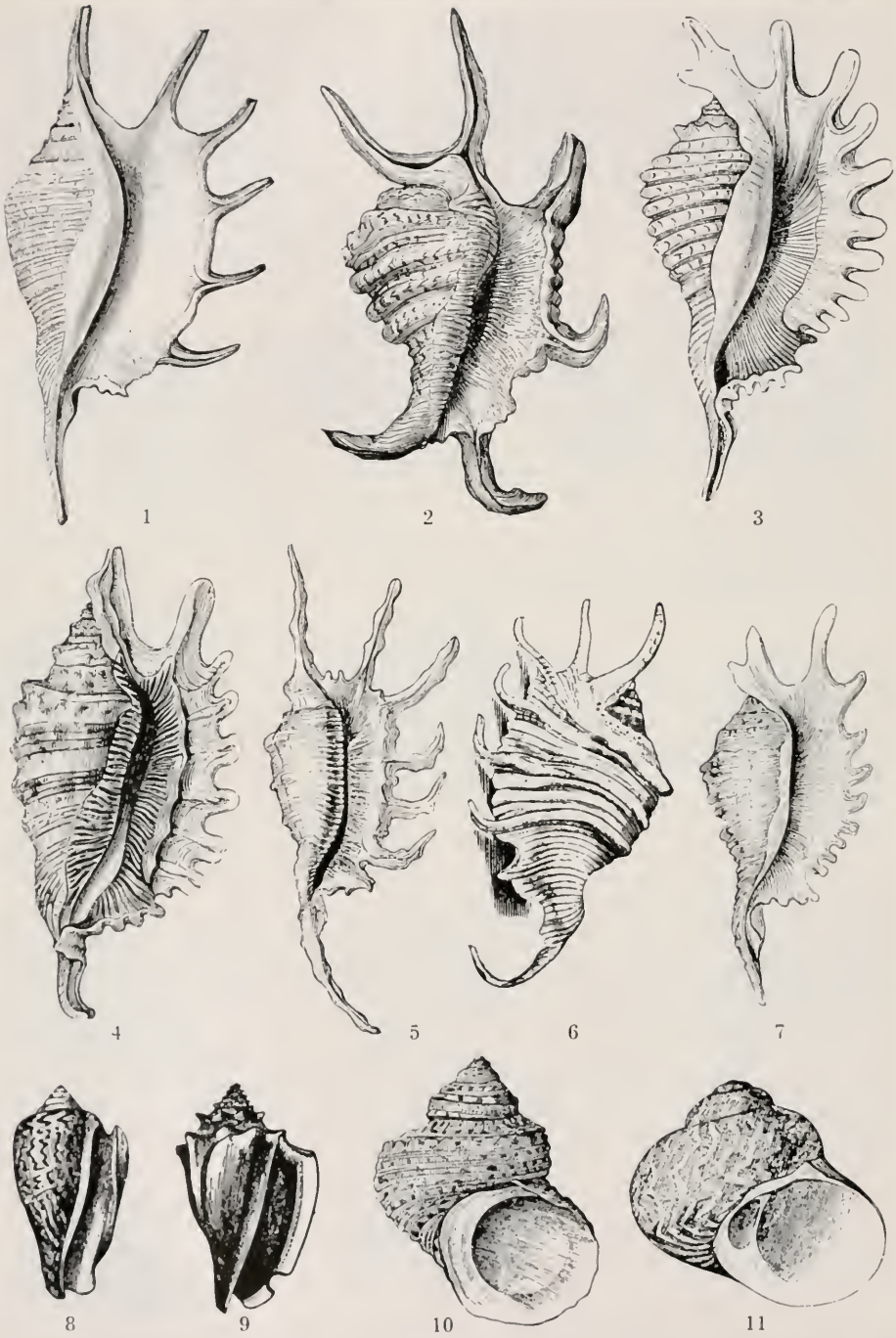

PLATE 42

1. **Pterocera lambis,** L. Spider Shell. Pacific generally. One of the most common shells of the genus and has been sold commercially for many years. Somewhat variable in shape but the general pattern is the same. Usually marked with blotches of dark color on back. Aperture white. 5 to 6" 50c to 1.00

2. **Pterocera rugosa,** Lam. Scorpion Shell. East Indies. It is a very common shell and usually shape of cut. Has been and is sold commercially. The six hooks in the form indicated usually identify the shell, but there is another shell very similar with reddish aperture that attains twice the size of this shell. 5 to 6" 1.00

3. **Pterocera violacea,** Swain. Philippines. This is a lovely white shell with rich violet aperture and must be fairly rare as none of my P. I. collectors have ever sent me a specimen. The numerous fingers along the edge differ from all other known forms. 3½". Rare.

4. **Pterocera elongata,** Swain. Mauritius. The stubby spines, flat lip and rich aperture with two spikes at top, will always easily identify this shell wherever found. I suspect it is fairly common but never seen on our market as yet in any quantity. 3½" 2.00

5. **Pterocera scorpio,** L. Philippines. A highly colored Scorpion Shell which is sold commercially but not always on the market. The aperture is a rich violet color and the 6 or 7 arms make it a very attractive shell. 4" 1.50

6. **Pterocera aurantia,** Lam. Philippines. The yellow Scorpion is a slender shell, more so than any of the other forms of the genus. Unique in having real hooked fingers. The aperture is a brilliant yellow, fairly common. 1.00

7. **Pterocera millepeda,** L. Philippines. I had a large number of these shells sent me from Sulu Sea, P. I., and while the fingers were stubby as shown in cut they were usually slightly curved upwards. The back is lined with brown and aperture same. There are usually 10 or more spikes. 3½" 1.25

8. **Strombus luhuanus,** L. Japan Sea and Pacific generally. A very pretty 2" shell with a brilliant red aperture bordered with black on the body opposite the lip. Quite common. 2" 25c

9. **Strombus gracilior,** Sow. West Mexico. Of similar shape and habits to the very common **pugilis** of Florida waters. This shell is almost invariably a light yellow with fuzzy periostracum. 2 to 3" 50c

10. **Turbo tesselatus,** Kien. Lower California. The shell is of a grayish-brown color with dots and waves of darker color over entire surface. The base of the shell has a greenish cast. Fairly common. 2 to 3" 75c

11. **Turbo undulatus,** Chem. Tasmania. The entire surface is covered with zigzag markings over a fine green color, it seems to be a hard shell to clean so as to show all of its very attractive features. This is true of many of the shells of this great genus. 2 to 3" 1.00

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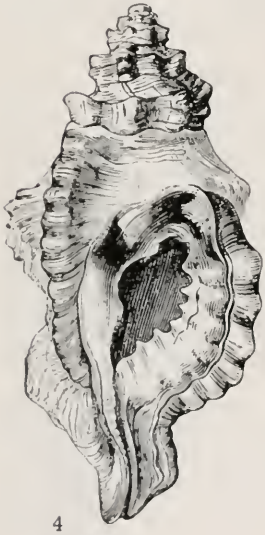

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PLATE 43

1. **Cymatium cutaceum,** L. Mediterranean Sea. It is of a horn color throughout with prominent nodules in middle of each whorl. Aperture is pure white with five or six nodules on edge. I have had similar specimens from Australian region. 3" 75c

2. **Cymatium doliarum,** L. Cape of Good Hope. Of similar color to preceding species but differs some in form and usually of smaller size. I had numerous specimens sent me from Natal. 2 to 3" 75c

3. **Cymatium grandimaculatum,** Rve. Philippines. A noble solid shell of a russet color and somewhat resembles the next species. Of a general knobby structure. 4" 2.00

4. **Cymatium lotorium,** L. Pacific and Indian Oceans. One of the attractive species of the genus. Of a russet color with dark bands on the aperture and a general knobby appearance. 4" 2.00

5. **Cymatium spengleri,** Chem. Australia. Of a light gray color, the aperture is white and the whorls are covered with circular ridges and nodules. Very desirable shell. 4" 2.00

6. **Cymatium tigrinus,** Brod. West Coast of Central America. A large russet-brown species of angular form, and peculiar shaped aperture. It lives under rocks and is quite rare, only occasionally seen in collections. 4 to 5" 5.00

7. **Cymatium exilis,** Rve. Philippines. It has been found living in sandy mud at 10 fathoms. Of a brownish-white color. Not very common. 2½" 2.00

8. **Cymatium scabrum,** King. Chili. The shell is covered with a deep brown hairy periostracum. When this is removed the whorls are seen to be covered with reticulations which run both ways. Aperture white. 2 to 3" 1.50

9. **Colubraria tortuosus,** Rve. Burias Id., P. I. One of the several fine species of this genus which belong to the Triton complex. The shells are covered with ridges and the upper whorls are often distorted. After this genus, in regular order come **Craspedotriton, Caducifer, Maculotriton,** from various places in both Pacific and Indian Oceans. Many of them are real Baby Tritons as they range down to half inch when full grown. 75c

10. **Cymatium tritonis,** L. South Seas. This is the real Trumpet Shell of the Tropics and is used by millions of natives, as a trumpet to call clans together for pleasure or war. They make a hole in one of the upper whorls and blow it the same as a cornet. The shell has a natural fine polish and richly ornamented with brownish colors. It attains 15" but 5 to 8" specimens are fine for cabinet. The name Triton for this genus has been changed by systematic writers to Cymatium, but I like this old name TRITON which has been used for two centuries and should never be changed to another. 5.00

PLATE 44

1. **Oliva angulata,** Sol. Gulf of California. One of the thickest and stongest shells of the genus. It is angular, mottled with light brown and usually has perpendicular darker stripes. Lip beveled, interior often flesh-colored when fresh. 3″ 1.00

2. **Oliva sericea,** Bolt. Philippines. A rather strong thick light colored shell with faint markings. Interior white. Usually lives below the tide line, hence rather scarce. 2¼″ 75c

3. and 4. is **Oliva erythrostoma,** Lam. Philippines. Years ago scientists changed this old name to Minacea by Bolten. I never have agreed. It is a most striking shell, brilliantly mottled with black, brown and white. Aperture deep orange-yellow. 2″ 50c 3″ 1.00

5. **Black Olive.** Any oliva may be found either black or yellow which are simply nacre put on over the usual pattern. I get black ones that are evidently erythrostoma with the orange aperture and others have white aperture which must be some other shell. 2½″ 1.00

6. **Oliva erythrostoma tremulina,** Lam. Philippines. A finely mottled shell. Some markings being zigzag. 2½″ 1.00

7. **Oliva mauritiana,** Mart. Phillippines. You see this shell labeled Oliva oliva, Bolt. just another of Boltens nonsensical changes. It is a richly mottled dark shell with blotches of black. Edge of lip is often flesh colored. 2″ 25c

8. **Oliva sanguinolenta,** Lam. Philippines. A dark species with fine dots of white, basal section rich red, which usually identifies the shell. Almost 2″ Philip. 25c

9. This cut is simply a rich yellow form of some unknown species. 2.00

10. **Oliva tricolor,** Lam. Philippines. The entire shell is richly adorned with zigzag markings of yellow green and white. 1¾″ 25c

11. **Oliva circinata,** Mart. Philippines. Mottled much like tremulina but the apex is usually completely filled with nacre. 2″ 50c

12. **Oliva venulata,** Lam. Gulf of California. The shell is somewhat angular completely covered with brown dots on a lighter background. 1¾″ 25c

13. **Oliva porphyretica,** Mart. Philippines. It is mottled with tent-like marks but may be a variety. Aperture purplish. 1¾″ 25c

14. **Oliva annulata,** Gmel. Philippines. The shell when fresh has an unusually glistening polish. Has numerous dark spots, and apex is salmon. Nearly 2″ 25c

15. **Oliva evania,** Duc. Philippines. This shell has all the markings of **sanguinolenta,** but of a higher shade and seems to be uniform. Base has a lighter shade of reddish. 1¾″ 25c

16. **Oliva elegans,** Lam. Philippines. Has dark zigzag markings on a lighter background and some specimens are close to tricolor. Aperture flesh color. 1¾″ 25c

17. **Oliva ornata,** Marrat. Australia. A brilliant light colored shell with various markings of brown. 1¾″ 25c

18. **Oliva caerulea,** Bolt. Philippines. It has dots and zigzag markings of yellow and brown. Aperture purple. 1¾″ 25c

19. **Oliva pindarina,** Duc. Gulf of California. The color pattern is vertical faint stripes and dots of brownish. 1½″ 25c

20. **Oliva spicata melcheri,** Mke. Panama. Spire only slightly elevated less so than type. Body color brownish in spots, and blotches. 1½″ 25c

21. **Oliva fumosa,** Mart. Philippines. The body is covered with zigzag and other shaped markings of a blackish color. 1½″ 25c

22. **Oliva tigrina,** Lam. Philippines. Has the form of bulbosa in being more rounded and is covered with dots. 1½″ 25c

23. **Oliva mustellina,** Lam. Philippines. Apex is almost flat, body completely covered with zigzag markings of a shade of brown. 1¼″ 25c

24. **Oliva spicata,** Bolt. Old name was arenosa, Lam. which I like better. The shell is slightly pyriform, spire elevated and body is completely covered with light brown spots. 1¾″ 25c

25. **Oliva tessellata,** Lam. Australia. Always a small shell with few botches regularly spaced and aperature is a deep lavender About 1″ 25c

26. **Oliva kaleontana,** Duc. Gulf of California. Looks like a small form of spicata but the several hundred specimens seem to be about uniform in size of 1″. 25c

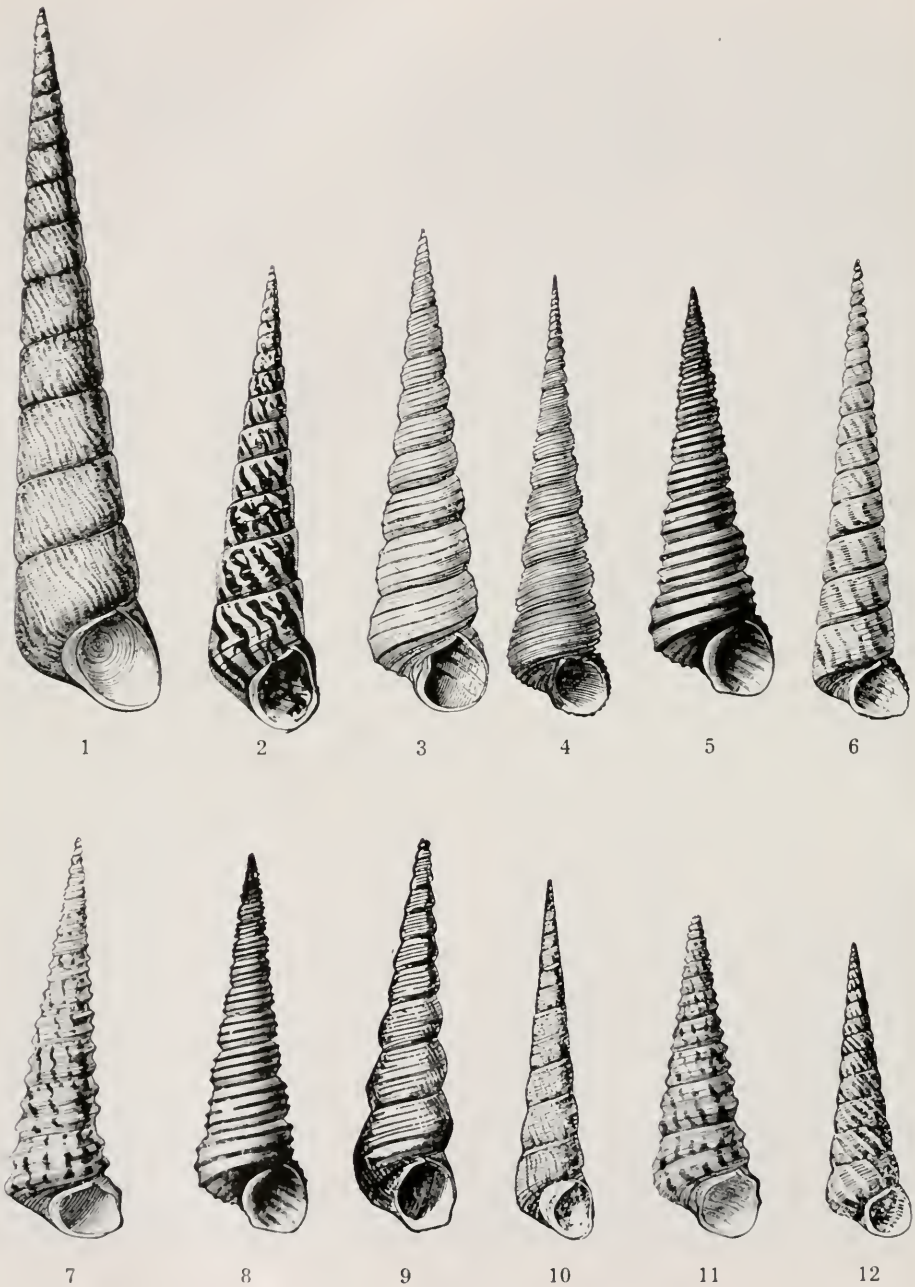

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PLATE 45

1. **Turritella broderipiana,** Sow. Peru. One of the finest of the genus, tall and rugged, brown or reddish color, it has been found from Mazatlan southward. 4 to 5" 1.00

2. **Turritella goniostoma,** Val. West Mexico. An elegant shell of large proportions. Rather smooth with faint traces of ridges. Completely mottled with shades of brown. Lives buried beneath the surface of soft ooze of Mangrove Swamps often in company with Area tuberculosa. 4 to 5" 1.00

3. **Turritella bacillum,** Kien. Ceylon. A light brownish shell with about five lines to each whorl. Some specimens may run larger. 3 to 4" 1.00

4. **Turritella terebra,** Lam. Philippines. A fine lined shell of horn color but sometimes showing reddish. It is well-ribbed, with very fine point. 4 to 5" 1.00

5. **Turritella cingulata,** Sow. Peru. A shell of many fine ridges and coated with a shade of brown. It is typical of others of the genus. 3½" 1.00

6. **Turritella columnaris,** Kien. Ceylon. The whorls are finely mottled with stripes of brown. A very trim looking shell. 4" 1.00

7. **Turritella maculata,** Rve. China. A deeply ridged shell beautifully marked with shades of brown. One of the finest of its size. 3" 75c

8. **Turritella attenuata,** Rve. Penang. Finely ornamented with deep circular ridges. One of the forty varieties known in the world of this genus. 4" 75c

9. **Turritella duplicata,** Lam. Indian Ocean. A very heavy well developed shell, that is of horn color. The ridges are beveled, and about 1" thick at base. Total length 4 to 6" ranging one of the largest of the genus. 1.00

10. **Turritella vittata,** Hutt. New Zealand. A species with fine striae across the whorls and faint circular ridges. 2 to 3" 75c

11. **Turritella bicingulata,** Lam. Cape Verde Islands. Ornamented with fine ridges and dark spots on a lighter background. 3" 75c

12. **Turritella nodulosa,** King. Central America. The usual ridges are crossed with stripes and brown mottled markings. 3" 50c

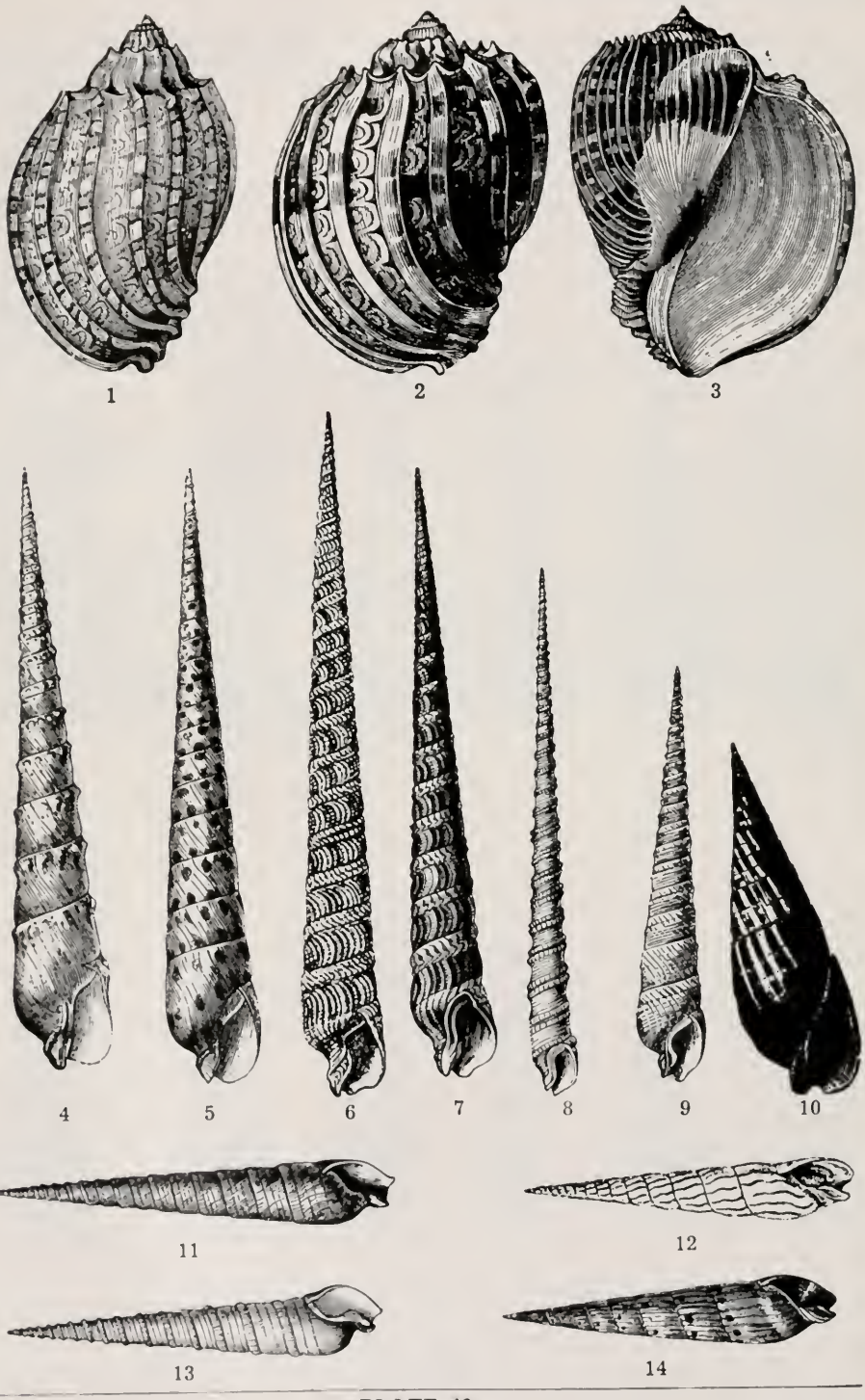

PLATE 46

1. **Harpa articularis,** Lam. Philippines. The Harps are all unusually beautiful shells which are much admired. This species usually has 12 ribs which are ornamented with dark black markings. 2 to 3" 1.50

2. **Harpa conoidalis,** Lam. Mauritius. This species attains the largest size of any of the dozen or so known forms in the genus. The 10 or 12 ribs are marked with 4 or 5 bands of darker color. Aperture white with darker shadings and two dark splashes on the body whorl. But there are many shells which exhibit very little color and mostly gray. 3 to 5" 3.00

3. **Harpa imperialis (costata),** Lam. Mauritius. Has about 20 ribs set close together, which is the main distinguishing feature. On the last whorl there are faint chestnut markings on a highly natural polished surface. Always has been rare. 3½".

4. **Terebra crenulata,** L. Andaman Ids. and Pacific generally. It is of a grayish-yellow color, ornamented with knobs along the top of each whorl, and faint brown dots. Fairly common. 4 to 5" 1.00

5. **Terebra oculata,** Lam. Mauritius. A very attractive shell of a light russet color adorned with white spots in regular rows. Rare. 4 to 5" 2.00

6 & 7. **Terebra pretiosa,** Rve. Philippines. A fine slender elongated species with curved ridges on each whorl. It is quite variable adorned with shades of brown and russet. Both cuts are the same species. 4 to 5" 1.50

8. **Terebra triseriata,** Gray. Japan Seas. One of the most slender of all the species of the genus with many whorls. Of light color its main beauty is its elegant form. Not often seen in collections. 3½" 2.50

9. **Terebra pulchella,** Desh. Philippines. It is of a yellowish-brown color and has faint striations. 2½" 1.00

10. **Terebra maculata,** Lam. Polynesia. The Marlinspike, as it has been termed in commerce, has been brought into this country in quantity, as its is the largest and heaviest of the genus. The whorls are striped with regular brown blotches. There are 330 species in the genus but this one always attracts attention by its huge size of 6 to 8". 50c to 2.00

11. **Terebra cingulifera,** Lam. New Caledonia. A tall slender species with fine corrugations and reddish color. Very attractive. 4" 75c

12. **Terebra cingulata,** Sow. Peru. There are fine regular dark markings on each whorl, and they have a glistening natural polish. Not common. 3" 75c

13. **Terebra monilis,** Quoy. Philippines. A tall slender species with ridges on each whorl, and faint color which adds to its attractiveness. Usually 3". 75c

14. **Terebra strigillata,** L. Hawaii. It has regular rows of dots in the top of each whorl. A smooth shiny species, that is a real gem. 2½" 75c

PLATE 47

1. **Turbo setonis,** Gmel. S.W. Australia. The shell is completely covered with vertical striations, also vertical zigzag light brown markings. Operculum covered with small nodules. 3" 1.50

2. **Tonna (Dolium) caniculata,** L. Philippines. A round light brown smooth shell with faint circular white stripes. Apical whorls lighter color. 3" 1.00

3. **Thais textilosa,** Lam. New Zealand. The shell has 4½ whorls. Over three-fourths of its size is last whorl. Has seven circular ridges. Light horn color. 3" 50c

4. **Tectarias pagoda,** L. Pacific generally. A fine conical shell, the largest of the genus. Has two rows of pointed nodules on last whorl and usually one on upper part. Gray color, usually flesh inside. 2 to 3" 50c to 1.00

5. **Pleurotomaria hirasei,** Pils. Japan. A fine conical shell, usually white, completely shaded with red diagonal stripes on each whorl. The notch is 1 to 1½". Interior of a white pearly color. Very rare. Found up to 500 fathoms. 40.00

6. **Ovulum ovum,** L. Pacific generally. Often called the Egg Shell as it is of a smooth glistening white, oval, each end of aperture is curved into almost a ring. The name of this genus was changed some years ago to Amphiperas but collectors like to stick to Ovulum. 3" 1.00

7. **Xenophora pallidula,** Rve. Japan and Philippines. The shell is conical, trochiform, whorls flattened carrying shells, corals, stones arranged and attached anywhere on the exterior surface, which completely disguises the shell. Lower surface is free, of a pale yellowish color. Most of the many forms inhabit deep water and are numerous in the Java and China seas. Some species are of huge size. 3 to 4" 2.50

8. **Argonauta hians,** Sol. Japan. Each whorl has vertical wrinkles, the top has two rows of dark nodules and the whole shell is of a medium dark brown color. Usual specimens 2 to 3". 3.00

9. **Thatcheri mirabilis,** Angas. Japan. The shell is angularly pyriform, solid, spire prominent, shorter than the aperture, whorls flattened above, strongly keeled at the periphery contracted below. Aperture with a broad incurved sinus between the extremity of the last keel and the junction of the body whorl. Basal canal wide and opened. Columella smooth. Outer lip simple. One of the most remarkable deep water shells in the world and usually rare. 25.00

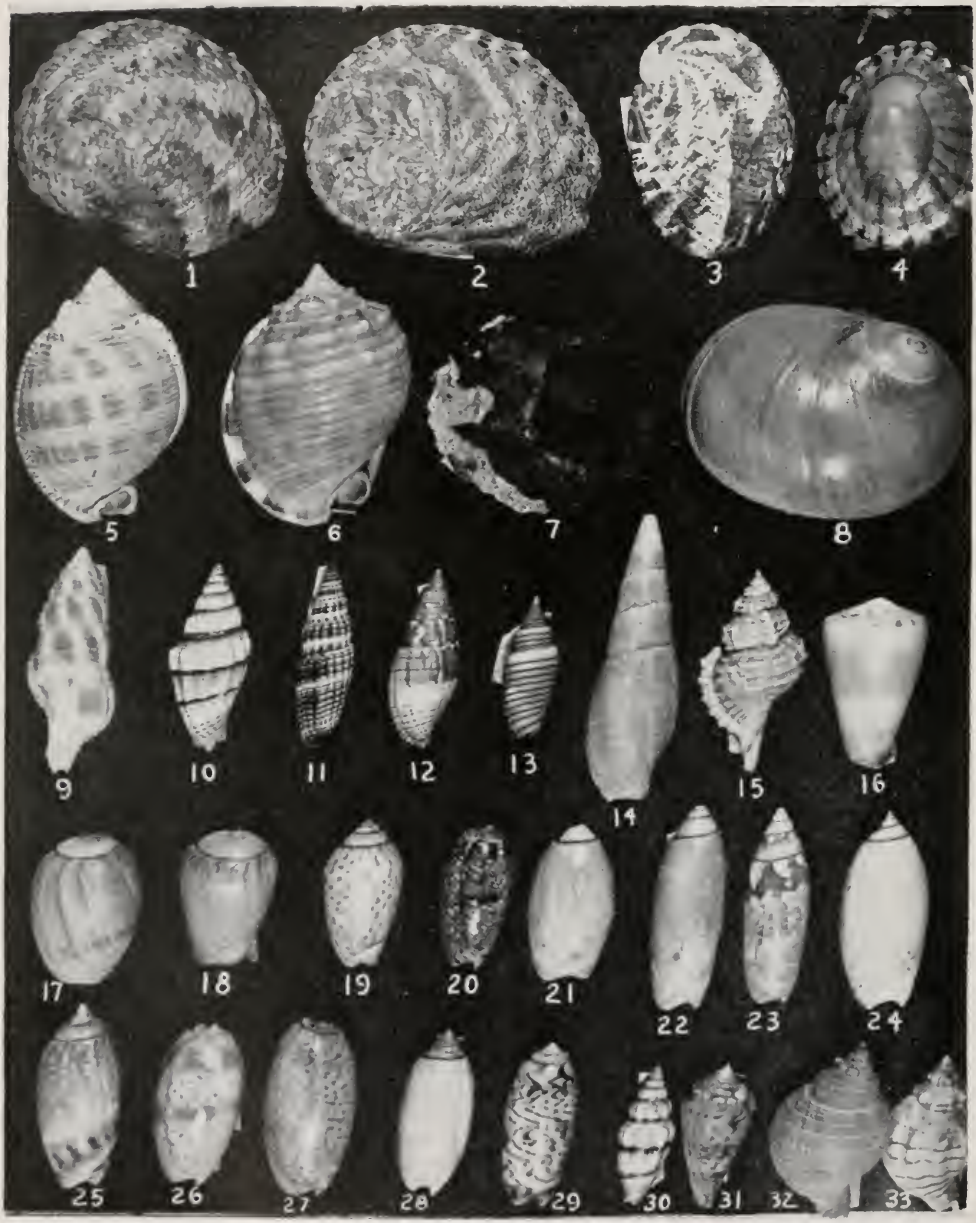
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PLATE 48

1. **Haliotis cyclobates,** Peron. Queensland. A really attractive small shell when first taken from water. The last whorl consists of most all of the shell, which is adorned with waves of white and brown. Interior iridescent.
2 to 2½" 1.00

2. **Haliotis emmae,** Gray. So. Australia. The shell is wrinkled, thin, and the round knobs that adorn the main whorl extend around the shell, only 6 usually being open. Interior is wrinkled and iridescent. 2½" 1.00

3. **Haliotis glabra,** Chem. Philippines. A small richly colored shell showing shades of cream, greenish and other colors on different specimens. Has 6 holes and interior is smooth pearl. About 2" 25c

4. **Patella transmerica,** Sow. Queensland. The color of interior is a pearly bronze the 22 perpendicular stripes show through. Center of interior is grayish, shape of owl. 1½" 50c

5. **Cassis japonica,** Rve. Japan. The shell is grayish with 4 interrupted bands of square blotches. Lip reflexed and showing brown transverse marks. 2" 50c

6. **Cassis abbreviata,** Lam. Gulf of California. The shell has circular tiny ribs but near crown there are two rows of small knobs. Lip is reflexed with 4 brown patches at back 2" 75c

7. **Vermetus nigra,** Lam. Philippines. A black solid shell which has to be broken off rock. It usually consists of only one huge coil, the whole shell is usually 2" 50c

8. **Polinices bicolor,** Phil. Queensland. The shell is of horn-color, rather flat for its size, umbilicus open partly covered by prominent callous.
2" 75c

9. **Latirus prismaticus,** Mart. Philippines. The shell is white with vertical interrupted bands of red. Aperture white. Nearly 2" 50c

10. **Mitra plicata,** Kien. Philippines. A plicated white shell with vertical brown bands. Base aperture toothed. 1½" 75c

11. **Mitra sanguisuge,** L. Queensland. A small shell with vertical plications of rich dark color, one white circular band in middle of whorl, aperture dark. All Mitra are beautiful and this one specially so. 1½" 50c

12. **Mitra hanleyana,** Sow. Queensland. The shell is smooth shining of uniform shades of brown. Lower half of last whorl mostly white.
1½" 50c

13. **Mitra filaris,** Queensland. The shell is adorned with circular brown ridges throughout. Upper part of whorl is white. Little over 1 inch.
50c

14. **Mitra glabra,** Swain. So. Australia. The color is light yellowish brown, smooth, base of aperture toothed. 2½" 1.00

15. **Cymatium kleineri,** Sow. South Africa. A small rugged shell. The picture is not quite typical, being shorter. 1" 50c

16. **Conus brazieri,** Sow. Queensland. A small smooth yellowish shell with one white band in middle of last whorl. Tip of shell shows pink.
1½" 1.00

17. **Olivancillaria auricularia,** Lam. Uruguay. A short stubby shell of about two whorls and usually uncolored. Aperture white. 1¼" 50c

18. **Olivancillaria braziliana,** Lam. Brazil. The top of the shell is almost flat and lighter colored than rest of shell. Color gray.
1¼" 50c to 1.00

19. **Oliva peruviana,** Lam. Peru. The shell is slightly angular, apex elevated. Color pattern spotted with shades of brown but there are many uncolored forms of dainty shades. Very variable.
1¼" 50c

20. **Oliva ispidula,** L. Philippines. An extremely variable shell running from white to black and all shades in between. Usually 1 to 1½".
25c

21. **Olivancillaria cauta,** More. The shell is almost entirely one whorl, wide aperture, grayish color. 1¼" 50c

22. **Olivancillaria acuminata,** Lam. A slender yellowish-brown shell from So. Australia, but it may be other shades. 1½" 50c

23. **Olivancillaria steeriae,** Rve. India. A slender strong shell with brilliant markings of brown shading. 1½" 50c

24. **Olivancillaria subulata,** Lam. The specimen figured is of a smooth gray color, the apical whorl being tiny. 1½" 50c

25. **Olivancillaria gibbosa,** Born. Brazil. A very variable shell. The specimen figured is mottled gray, apical whorls darker, and there is a wide band near the base of brown blotches on yellow. Other shells may be differently colored throughout. 1½" 25c and 50c

26 and 27. **Olive bulbosa,** Bolt. East Africa. This shell has many patterns, the ones illustrated being the lighter shades. Other specimens may be richly mottled with black. 1¼" 25c. I have been making up collections of 20 specimens, 5 different patterns of 4 each for only 2.00 and they seem to give great satisfaction.

28 and 29. **Olive ispidula,** L. Philippines. Another extremely variable variety the two figures showing extreme types. Some are entirely dark, others mottled and may have a rich lavender inside. It is very common on some of the islands.
25c 6 of smaller sizes 25c

30. **Mitra plicaria,** L. Queensland. This small reddish and white shell has two prominent dark bands. Base of shell is pink. Slightly over 1".
50c

31. **Conus kiiensis,** Kuroda. Japan. Upper whorls are carinated, main color pattern light brown with two darker bands. Lip thin, sharp.
Slightly over 1" scarce 1.00

32. **Siphonalia trochula,** Rve. Japan. The shell is light brownish, with many spiral lines, aperture strong and there are interior spiral lines.
1¼" 50c

33. **Siphonalia cassidaeformis,** Rve. Japan. The shell has a row of nodules on top of last whorl, six circular brown lines, lip strong, interior white. 1½" 50c

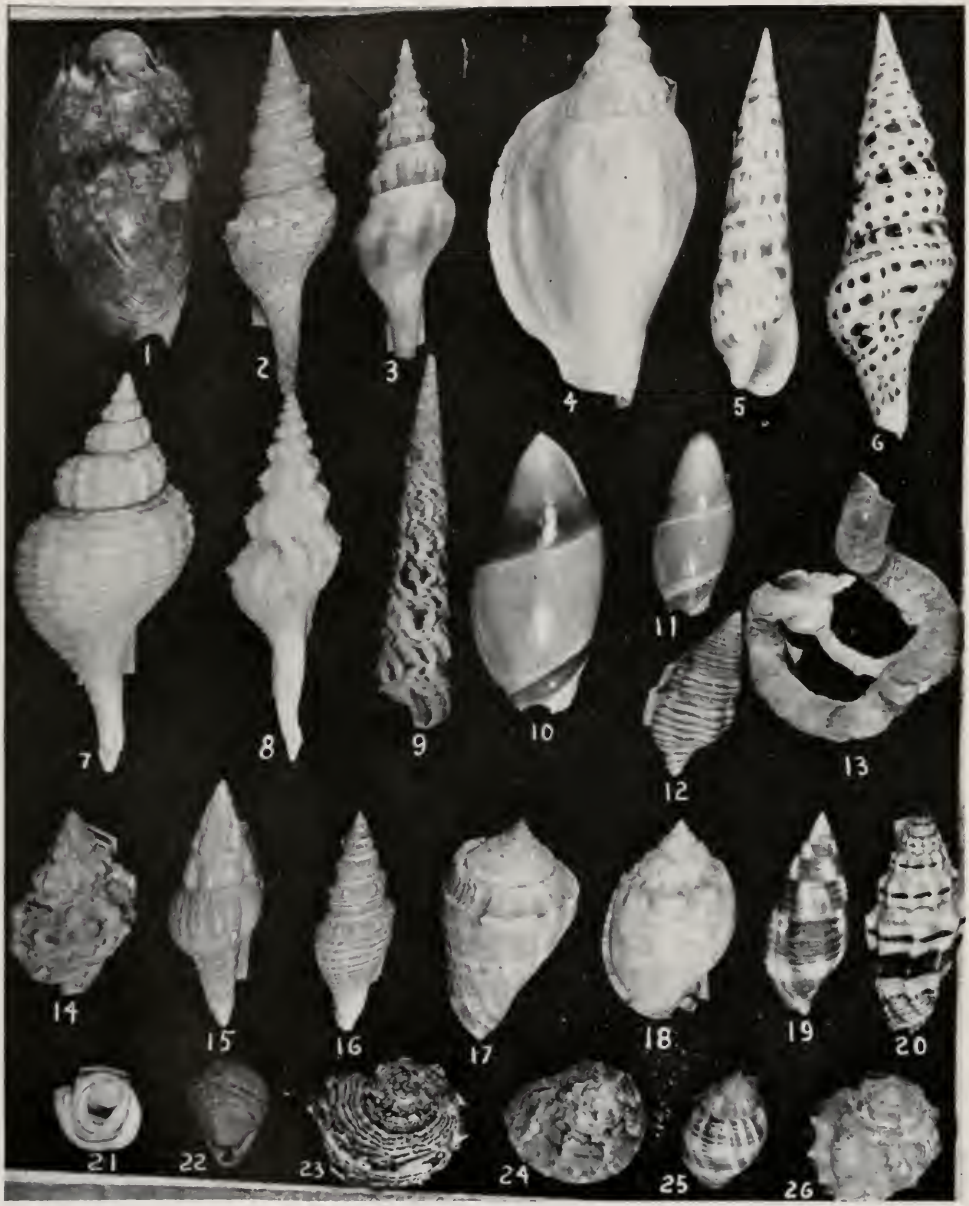

PLATE 49

1. **Melo flammea,** Gmel. Queensland. A very handsome "Baler" Shell, richly mottled with shades of brown and white. 3 to 5" 2.00-3.00

2. **Turris unedo,** Val. Japan. One of the fine large forms of this wonderful family that contains many hundred species. It has prominent row of knobs on upper part of whorl and entire shell faintly dotted with brown dots. 3" 1.00

3. **Turris kaderlyi,** Lisch. Japan. The shell differs from preceding form in being unusually smaller, with prominent brownish ridges on each whorl. 2½" 1.00

4. **Strombus epidromus,** L. Philippines. It is easy to always remember this fine white shell by the prominent flaring lip. 3" 1.00

5. **Terebra chlorata,** Lam. Philippines. This fine species has only come on the market in recent years. It has two rows of square spots on each whorl. 3" 50c

6. **Turris crispa,** Lam. Philippines. One of the finest of the genus being of good size and brilliantly marked with rows of squarish blotches of black on a white background. 3½" 1.00

7. **Verconella pyrulata,** Lam. Tasmania. This fine whitish shell is covered with prominent ridges and resembles a Fasciolaria. It belongs to the great Family of Siphonalia. 3½" 1.00

8. **Fusus dupetithouarsi,** Kien. Gulf of California. A fine white shell usually covered with a fuzzy yellowish epidermis. Runs 4 to 5" 1.00

9. **Turritella tigrina,** Glen. Gulf of California. A handsome shell, each whorl being covered with with brownish zigzag markings. 3" 1.00

10. **Ancilla albocallosa,** Lisch. Japan. This shell is one of the finest of the genus, being smooth and richly adorned with brown above and below, the main body whorl being flesh color. 2¼" 2.00

11. **Ancilla urasia,** Lisch. Japan. This fine shell looks like a small edition of the above species and much resembles it in every way. 1½" 1.00

12. **Latirus turritus,** Gmel. Philippines. A smallish shell, completely covered with brilliant reddish-brown markings. 1½" 50c

13. **Vermetus sipho,** Lam. Australia. A unique example of this remarkable genus which assumes all sorts of forms in its natural growth. You never see two twisted alike. 2" 1.00

14. **Ranella lampas,** L. Philippines. A young very knobby shell often with rich red aperture, unknown on larger shells. 2" 50c

15. **Latirus castaneus,** Rve. Panama. A handsome shell with perpendicular ridges, the whole body being a yellow color. All of this genus are fine colored shells. 2" 75c

16. **Turris granosa,** Helb. Japan. The shell has fine circular ridges and row of small nodules on upper whorl. Uncolored. 2" 1.00

17. **Strombus marginatus,** L. Philippines. A shell with always distinct characteristics. Pyriform, small rows of nodules on top of main whorl, a rich shading of light brown throughout, flaring lip. 2" 1.00

18. **Cassis inornata,** Pils. Japan. A small round shell with fain brown markings tiny tubercles on top of main whorl, outer lip edged with brown spots. 1¾" 50c

19. **Mitra chrysalis,** Rve. Philippines. The shell has faint circular ridges and body mottled with a reddish-yellow. 1¾" 75c

20. **Mitra intermedia,** Kien. Australia. The upper whorls are ornamented with broken line of black, lower whorls with wider lines and widest in middle of last whorl. Perpendicular ridges throughout. 2" 50c

21. **Tenegodus weldi,** Woods. Australia. A small shell, irregularly coiled with opening as usual in top of each whorl. 1" 1.00

22. **Terebratella rubicunda,** Sow. Australia. A smallish triangular reddish brachiapod, usually found attached to and living with other shells. The Brachiapods are not true mollusca, as they have an internal structure. Only about 200 species living in the world and thousands of fossil forms. 1.00

23. **Delphinula atacta,** Rve. Japan. A small form with flat top, whorls ornamented with ridges and a few spines, usually stubby. Of a reddish color and fairly rare. 1½" 2.00

24. **Turbo gruneri,** Lam. South Australia. A small fairly smooth shell with circular ridges and of a reddish-brown color. 1¼" 50c

25. **Cancellaria obesa,** Lam. Gulf of California. A small shell which much resembles our reticulata of Florida, except that it is more smooth, has two brownish bands and thin lip. 1" 50c

26. **Cuma coronata,** Lam. East Africa. A small uncolored shell completely covered with pointed tubercles. The cuma are a branch of Thais. 1¼" 50c

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PLATE 50

1. **Conus omaria,** Brug. Philippines. A rather slender rounded shell of brownish shade, completely covered with tent-like markings. 2½" 1.00

2. **Conus quercinus,** Hwass. Philippines. A handsome yellowish pyriform shell completely covered with fine striae. 2-2½" 1.00

3. **Conus pennaceus,** Born. Japan. Only slightly pyriform and completely covered with tent-like markings. 1¾" 1.00

4. **Conus regularis,** Sow. Gulf of California. A handsome pyriform shell with zigzag brownish markings. Spire elevated to point. 2" 1.00

5. **Conus planorbis,** Born. Philippines. Uniformly reddish-yellow with bands lighter color. Spire nearly flat with irregular markings. 1" 1.00

6. **Conus anemone,** Lam. Australia. Slightly pyriform, rather light and thin with light brownish markings. 1½" 50c

7. **Conus retifer,** Mke. Okinawa. A short pyramidal shell of reddish-chestnut with few white tent-like markings on russet background. 1¼" 1.50

8. **Conus eburneus,** Hwass. Indian Ocean. The shell has a white background covered with squarish blotches of black. 1¼" 50c

9. **Conus cancellatus,** Hwass. Japan. A white shell with elevated spire and fine circular ridges. 1½" 1.50

10. **Conus figulinus,** L. Philippines. Uniformly light gossy brown with fine circular lines. Very distinct in color. 2 to 2½" 1.00-2.00

11. **Conus interruptus,** Brod. Gulf of California. A pyriform shell with elevated spire, completely covered with dots and sometimes darker shades. There is a very dark form called mahoganyi. 1½ 1.00

12. **Conus orbignyi,** Aud. Okinawa. A thin and slender shell very unusual in this genus. Spire elongated. There are wavy marks of brown and circular lines. 2" 1.00

13. **Cypraea arenosa,** Gray. South Seas. Base is white, sides very light brown with four distinct brownish bands. 1½" 1.00

14. **Cypraea walkeri,** Gray. Queensland. Upper surface shade of light brown, few spots along lower sides, wide brownish band. Rounded below, teeth strong, and color about same as top. 1¼" Rare 2.50

15. **Cypraea decipiens,** Smith. West Australia. Base and sides are a rich, shining black. Top mottled with white and light black. A brilliant rare shell that always used to sell for 10.00. 1¾" 4.00

16. **Cypraea ventriculus,** Lam. South Seas. Base shining, sides reddish-black, top white and russet color. A rich colored distinct shell. 1¾ to 2" 1.00 1.50

17. **Cypraea vitellus,** L. Philippines. It is of a light shade of brown with white spots. Base white. 1½ to 2" 25c to 1.00

18. **Cypraea hungerfordi,** Sow. Japan. Base is creamy-white also lower sides. Just above is a fringe of black and top is mottled with dots and markings of russet. A deep water shell and always rare. 1¼" 5.00

19. **Cypraea xanthodon,** Gray. Queensland. Lower sides have a few brown spots, base flesh color, teeth brownish, top is reddish-chestnut with two faint circular bands. Little over 1". Rare 2.00

20. **Cypraea subviridis,** Rve. Queensland. Top with chestnut markings, usually has a broad darker band. Base flesh color. Over 1" 1.00

21. **Cypra carneola,** L. Pacific generally. Base flesh color, side grayish, top with yellowish bands. Shell figured is 1" but they are found to 3" and frequently are confused with the rare aurantia. 25c to 3.00

22. **Murex phlorator,** Ad & Rve. Japan. A small winged form, almost triangular. Only faint shadings of brown. 1¾" 1.00

23. **Strombus gibberulus,** L. East Africa. The top whorls are usually distorted and body has circular brownish band of different widths. Aperture lavender. 1½" 25c

24. **Strombus floridus,** Lam. Pacific generally. A small stubby shell with russet markings, white band, thick lip. Very common. Imported by ton for novelty trade. Over 1" 25c

25. **Cymatium vespaceum,** Lam. Australia. Shell usually white with perpendicular ridges and knobs, lips wide. Over 1" 50c

26. **Cymatium rubecula,** Ch. Philippines. A small typical Triton completely covered with nodules and very variable shades of yellow, reddish and brown. 1½" 50c

27. **Cymatium weigmanni,** Ant. Panama. Row of knobs on top of whorl, circular brownish lines, each whorl flattened on top. 2 to 3" 1.00

28. **Turbo porphyrites,** Mart. Philippines. An odd rounded triangular shell mottled with dark color. 1" or over, 50c

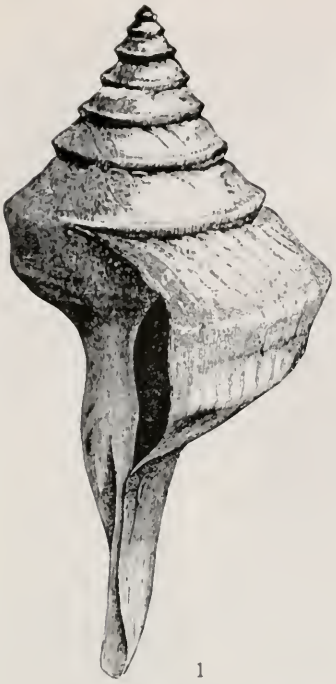
29. **Turbo coronatus,** Gmel. East Africa. Top flat, two rows of nodules on last whorl, color usually whitish. Over 1" 50c

30. **Latiaxis japonica,** Dkr. Japan. Usually white, each whorl is adorned with a crown of flattened spines, clear to apex. Resembles a Chinese Pagoda. 1¾" 2.00

31. **Drupa horrida,** Lam. Philippines. Base of shell is flat, aperture deep lavender, balance of shell covered with nodules and usually whitish. 1½" 50c

32. **Siphnalia pallida,** B&S. Gulf of California. The shell is entirely pure white, whorls have sharp points and are angular. 1½" 50c

33. **Cantharis gemmata,** Rve. Panama. A glistening white shell with perpendicular ridges and entire shell has circular ridges. 1¾" 50c



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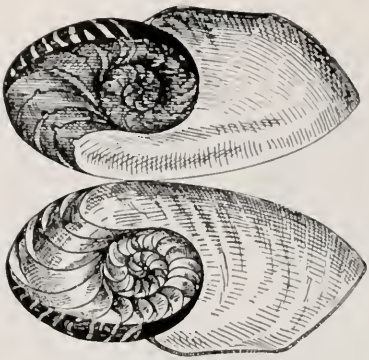

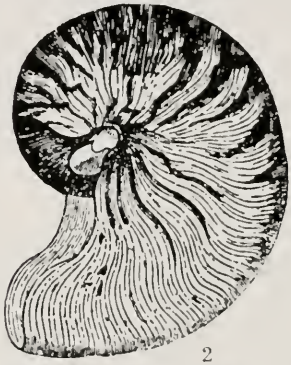

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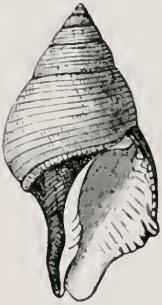

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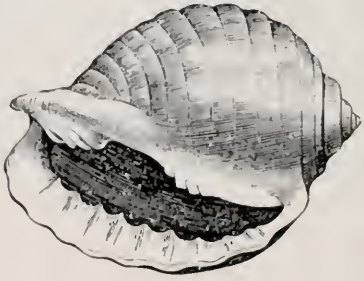

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PLATE 51

1. **Megalatractus proboscidifera,** Lam. Australian reefs. One of the two largest marine shells in the world. Of a uniform yellow color it attains 20" or more but fine 15 or 16" shells are usually the best color and upper whorls are more apt to be perfect. It is a comparatively light and thin shell for its immense size. The other unusual marine univalve shell is the Fasciolaria gigantea of Florida. The pair shows the highest development of size in univalve shells. It is placed with the Melongenas. 5.00 to 10.00

2. **Nautilus pompileus,** L. East Indies. When this shell is polished it is commonly called the Pearly Nautilus. In the New Hebrides and other island groups of the South Seas the fishing for Nautilus is a regular business of the natives. They fashion a barrel of bamboo, with a curved inward opening at each end, place a rock inside to make it sink, put in the bait and drop it to the bottom in 30 to 50 ft. of water. Sometimes there will be a long string of these traps connected with ropes and buoys. The Nautilus mollusk crawls along the bottom, goes into the barrel after the bait and seldom knows how to get out. Twenty million years ago there were several hundred species but now there are only two living forms. Oliver Wendell Holmes wrote a poem on the Nautilus which is often read in schools. You will find much information on this species in the August 1935 number of the National Geographic Magazine. The upper cut shows a shell cut in half with the air chambers. Size 6 to 9". 3.50

3. **Columbrarium pagoda,** Less. Japan. A very odd shell with spire like a Pagoda and long slender basal appendage. There are three forms known. It seems to be allied to the Turris. Is of brownish color. 3" 2.00

4. **Tibia (Rostellaria) curvirostris,** Lam. Philippines to Red Sea. This is a strong robust highly polished shell with elongated spire and stubby spiral base. A brilliant yellowish species which has always been much admired by shell collectors but so often not on the market in sufficient quantity. 6" 2.50

5. **Latirus polygonus,** Gmel. Mauritius. A finely marked striking species and one of the largest of the genus. It is yellowish-white and the ridges are splashed with rich dark brown. 2¼" 1.00

6. **Latirus craticulatus,** L. Mauritius. This species has spiral lines of red color and prominent ridges. I have had it from Philippines. 2" 1.00

7. **Latirus leucozonalis,** Lam. West Indies. A comparatively smooth species of a brownish color. Most of the shells of this genus are ridged in all directions. 1¼" 50c

8. **Latirus smaragdulus,** Lam. Philippines. A dark blackish shell which is often completely covered with bryozoans of all sorts. Usually must be well cleaned to know what you have found. 1¼" 50c

9. **Latirus nassatulus,** Lam. Mauritius. A short stubby species with prominent ridges of a whitish color. The aperture is deep pink. 1½" 50c

10. **Dolium (Tonna) ringens,** Swain. Panama. The Cask Shell. Must be fairly common from Lower California southward as they used to be sold commercially in all sizes from 3 to 8 inch. They are almost perfectly round with flaring aperture. There are 35 species of this genus in the world most of which are comparatively thin shells but this one is a solid fellow. Lives under edges of rock at low tides. 1.00 to 2.00

11. **Dolium (Malea) pomum,** L. Philippines. A handsome shell of pure white or flesh color. They are round, with a slightly flaring aperture. Burrows in sand bars. 2 to 3" 50c to 1.00

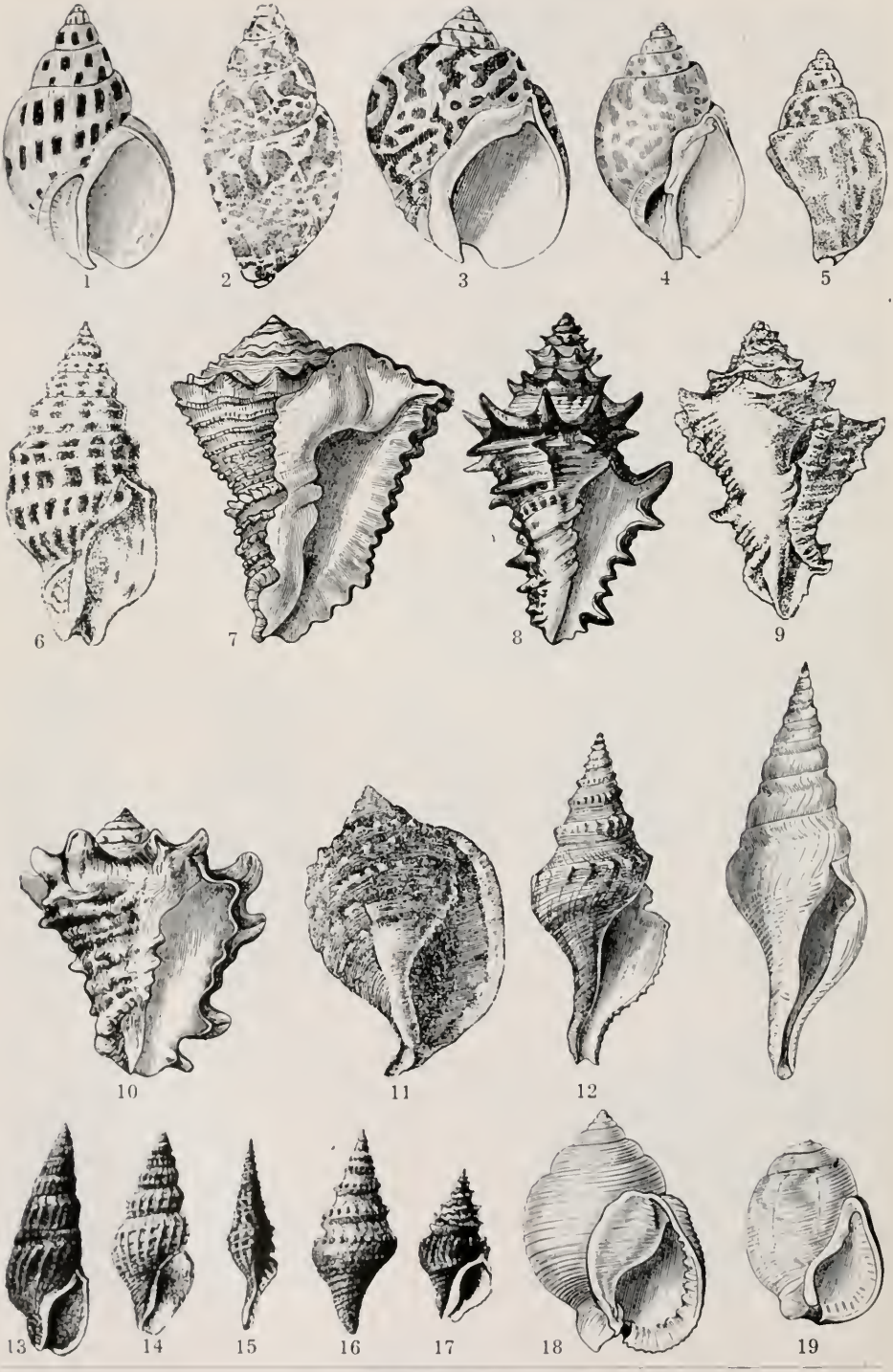

PLATE 52

1. **Eburna areolatus,** Lam. Hong Kong. A round, elevated spotted shell that is not real common. All of this genus are called Ivory Shells and I have never heard the reason. They have a periostracum usually brown which must be removed to show the color or pattern. 2" 1.00

2. **Eburna japonicus,** Sow. Japan Seas. This is the best Ivory Shell of the genus, and has been most widely distributed. They are so common they are manufactured into novelties, such as whistles, etc. 2½" 50c

3. **Eburna valentianus,** Swain. Karachi, India. Similar to the others but has a tendency to be shorter and wider, ornamented with dark irregular blotches. The whorls are curved inward. One of the rarest of the group. 2" 2.00

4. **Eburna spiratus,** Lam. Ceylon. A very distinct species with splashes of faint drab over the surface. The top of each whorl is curved inward, about ¼ inch. Size 2". 1.50

5. **Erburna lutosus,** Lam. New Zealand. A small more slender form from the southern part of the world, and ornamented with irregular splashes of yellowish-white, the last whorl is humped at top. There are 16 species in this genus which are widely distributed. 2" 1.00

6. **Pusionella nifat,** Brug. West Africa. This species is smooth and finely ornamented with splashes of yellowish-brown. It is 2". There are about 14 species of this genus and this one is the largest. Most of them are from the same region and seldom seen in American collections. There are just no live collectors in the territory where found. 2.00

7. **Vasum cassidiformis,** Val. Brazil. A very strange form of shell which much resembles some of the wonderful Pliocene fossil species found in Florida. It has little ridges of knobs over the surface and wide white aperture. 3" 1.50

8. **Vasum ceramicum,** Lam. Moluccas and Pacific generally. This species is widest in middle and tapers to each end. Finely ornamented with spines along the top of whorl. Not common. 3" 2.50

9. **Vasum capitellum,** L. West Indies. All of the 13 known species of this genus are strong robust shells and of very odd form. They are usually covered with marine growths which must be removed to show their real pattern. This species is of light brownish, has a few knobs. 2½" 1.00

10. **Vasum cornigerum,** Lam. East Indies generally. This species seems to be one of the most common of the group and the one most often seen in collections. It is wide at the top tapering to base, covered with knobs of black and prominent rounded tops. 3" 1.00

11. **Cassidaria echinophora,** L. Mediterranean Sea. Of the 14 known forms of the genus this is perhaps the most common one seen in collections. It is of horn color, looks much like a Cassis, with which it is closely affiliated. 2½" 1.00

12. **Turris Javana,** L. China. These two cuts show the true Javana and a variety that used to be called nodifera. They are of a grayish color, fairly common and somewhat variable. 2 to 3" 1.00

13. **Turris fusca,** H&J. Gulf of Omar. This little fellow comes from 150 fathoms. It has the cross ridges found in many other species. Almost black. 1½" 50c

14. **Turris coffea,** Smith. Cebu, P. I. A little brownish shell with usual ridges. 1½" 50c

15. **Turris grandis,** Gray. Philippines. A princely shell even if the cut is small. One of the largest of the genus ranging to 5½". It is ornamented with circular ridges and hundreds of small reddish-brown dots. It is truly a grand Turris. 2.50

16. **Turris muricata,** Lam. West Africa. A neat little white shell with rows of sharp spines and perpendicular ridges on the whorls. 1½" 75c

17. **Turris bijubata,** Rve. New Caledonia. A sharp pointed little chap of a dark color and typical of many of the small forms of this genus. 1¼" 50c

18. **Desmoulea retusa,** Lam. Liberia. It is a small round lined shell with white aperture about 1". There are 14 species in the world, all of which are more or less rare and seldom seen in collections. 1.00

19. **Desmoulea abbreviata,** Gmel. Natal, So. Africa. Differs slightly in form from preceding species but the spiral lines and aperture immediately place it in this genus. This is the form most commonly seen in collections and my collector in Natal found it freely on the beaches of that Colony. 1.00

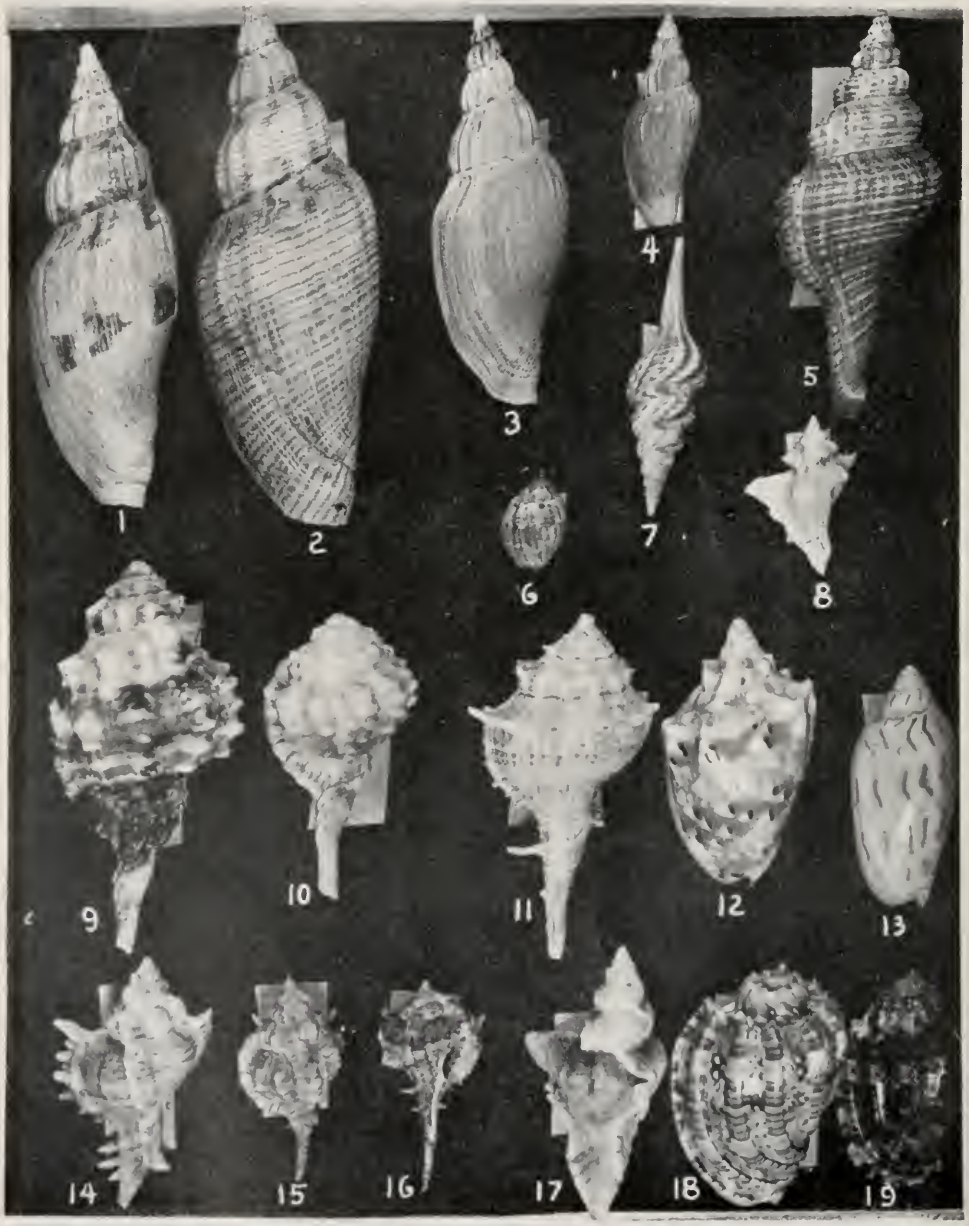

PLATE 53

1. **Voluta daviesi,** Fult. Japan. A tall slender shell with vertical striae and squarish brown blotches on each whorl. Always deep water. 4" 6.00

2. **Voluta mentiens,** Fult. Japan. Somewhat similar to preceding species but with circular striae as well as vertical riblets. The brown shadings are more suffused. 4/5" 5.00

3. **Voluta cancellata,** Kuroda. Japan. The shell is practically uncolored with vertical striae and ridges. 3" 4.00

4. **Voluta delicata,** Fult. Japan. A small uncolored shell with vertical ridges more prominent on the upper whorls. 1¾" 1.25

5. **Fusus laticostata,** Desh. Philippines. A typical shell in form, with circular ridges all shaded brown. 2½" 1.00

6. **Voluta cumingii,** Brod. Gulf of California. One of the smaller forms of this genus which seldom attains over 1". It has vertical ridges of brown, lip is wide at edge and aperture narrow. 1.00

7. **Fuscosurcula mirabilis,** Sow. Japan. A handsome member of the Turris Family with curved vertical stripes of brown. 2½" 1.50

8. **Alipurpurea centrifuga,** Hinds. Gulf of California. This fine little white triangular shell was formerly a Murex and looks like one. Each of the three ridges has a central point. Rare. 1½" 2.00

9. **Cymatium dunkeri,** Lisch. Japan. This is a fine member of the great Triton group. It has vertical ridges or knobs, aperture strong and rounded, tail at bottom curved backward. Aperture orange. Main color pattern, shades of brown. 3½" 2.00

10. **Cymatium gutturnium,** Koch. Philippines. The shell is mostly uncolored, knobby, tail curves backwards, aperture rounded, and all well covered with nacre. Aperture may be orange. 2¼" 1.50

11. **Tudicle spinosa.** H&Ads. Queensland. I had never seen this shell until summer of 1950. My other books only illustrate one species. I have an idea this shell is rather rare as owner said he had only taken 10 specimens in years. May be deep water. The main shell is well rounded with row of points on top of whorl, which extend to about top. The extended canal has a few points also. Generally of a white color with faint brownish markings. Only a very few forms in the genus. 5.00

12. **Voluta pulchra,** Sow. Barrier Reefs, where it has only been found to any extent on one island but likely lives on many when that vast territory is better known. The shell is covered with tent-like markings of black and white on a light reddish background. As its name indicates it is one of the grand shells of the genus. 2" 10.00

13. **Voluta caroli,** Ired. Barrier Reefs, Australia. A comparatively rare shell anywhere. It is a shiny flesh color with three rows of brown markings. Some specimens are uncolored. 2 to 3" 6.00 and up

14. **Murex denudatus,** Perry. Queensland. This shell is of a light pinkish color to white and much resembles our salleanus of Florida. 2" 1.00

15. **Murex motacilla,** Ch. Barbadoes. A neat little chap with tail curved backward, prominent ribs and knobs, few sharp short spines. 1½" 1.00

16. **Murex recurvirostris,** Brod. Gulf of California. The three prominent rounded ridges on this shell are marked with dark brown and white, few short spines and tail is straight. 1¾" 1.00

17. **Murex triformis,** Rve. Tasmania. There are two prominent upright ridges on body whorl, aperture is flat and flaring. Almost uncolored. 2½" 1.00

18. **Harpa nobilis,** Bolt. Philippines. I suspect this shell is found everywhere in Pacific and Indian Oceans. It is a small form but very richly colored with red, brown and white. 2" 2.00

19. **Harpa minor,** Lam. Philippines. One of the small forms of the genus. Fresh specimens are richly mottled with black, brown and white. 1½" 1.00

PLATE 54

1. **Cassis japonica,** Rve. Japan. Also figured on Plate 48.

2. **Cassis abbreviata,** Lam. Gulf of California. Also figured on Plate 48.

3. **Cassis pila,** Rve. Japan. The shell much resembles japonica, but spots are more faint or entirely lacking. 2½" 50c

4. **Cassis achatina,** Lam. Cape Verde Ids. A small round form with faint flesh color. Rather shiny. 1¼" 50c

5. **Melongena galeodes,** Lam. Philippines. Usually dark color, row of short spines on top of whorl, another similar row near base. Body lines with circular rows of brown. 2" 50c

6. **Turbo petholatus,** L. Philippines. With the green operculum which boys during war called "Cat eyes." But many of them are white. The shell is very smooth and shiny and brilliantly mottled, hardly any two of the same pattern. 2" 1.00

7. **Ranella ranelloides,** Rve. Japan. A typical small shell of this genus, covered with rows of tubercles. Light brown in color. 1¾" 50c

8. **Strombus auris-dianae,** L. Philippines. The back of the shell may be rough or smooth, aperture a deep reddish-orange, with a short spire on top of lip. 2" 50c

9. **Distorsio constrictus,** Brod. Panama. The aperture is distorted as usual similar to the Florida form. Color, white. 2" 1.00

10. **Distorsio anus,** L. Philippines. The most remarkable shell of the genus, the whorls being distorted, covered with knobs, and the face of the aperture is broad, covered with rich nacre. 2" 1.00

11. **Latirus cingulata,** L. Panama. An attractive shell covered with circular rings of black on a white background, but none can be seen in life as they are covered with a brown periostracum. There is a sharp tooth at base of aperture. 1¾" 75c

12. **Latirus polygonus,** Gmel. Philippines. A handsome shell with notched perpendicular ridges of black color, either white or flesh-colored between. 1¾" 1.00

13. **Cantharus insignis,** Rve. Gulf of California. This shell is one of the large forms of the genus and is perpendicularly marked with stripes of blackish-brown. 2" 75c

14. **Nessarius magnifica,** Lisch. Japan. Some years ago they changed the name of the genus to Hindsia, and you may see the shells with either name. This form is one of the finest, with vertical ridges on each whorl, only faintly marked. 1¾" 50c

15. **Cancellaria laticostata,** Kob. Japan. This shell is closely allied to reeveana, Crs. It is covered with fine ridges and only faintly marked with brown. 1¾" 50c

16. **Cancellaria cassidaeformis,** Rve. Panama. An unusual form reticulated, a row of points on top of whorl, interior of aperture ridged. 1½" 75c

17. **Cantharus erythrostoma,** Lam. West Australia. A fine small shell with vertical ridges, tinged with brown. Ground color yellowish. 1¼" 25c

18. **Siphonalia nodosa,** Mart. New Zealand. The shell is roundish with rows of small tubercules and vertical bands of brown. 1¾" 50c

19. **Vasum cornigerum,** Lam. Philippines. The shell is pyriform, covered with tubercles well marked with white and black color. 2" 50c

20. **Latirus smaragdula,** Lam. Philippines. A round bulbous shell with very fine circular lines, usually a reddish-brown or blackish color. 1¾" 50c

21. **Thais tuberculata,** Lam. Philippines. There are very few shells of this genus so richly adorned with pointed spines, and black color. 1¾" 50c

22. **Crucibulum imbricata,** Sow. Gulf of California. There are Cup and Saucer Shells all over the world and this is one of the best. Always irregular in shape; the inside cup is pure white. 1½" 50c

23. **Astraea olivaceum,** Wood. Gulf of California. A low pyramidal shell covered with lines only faintly colored. Below most of the shell is flesh color with reddish at center. 1½" 50c

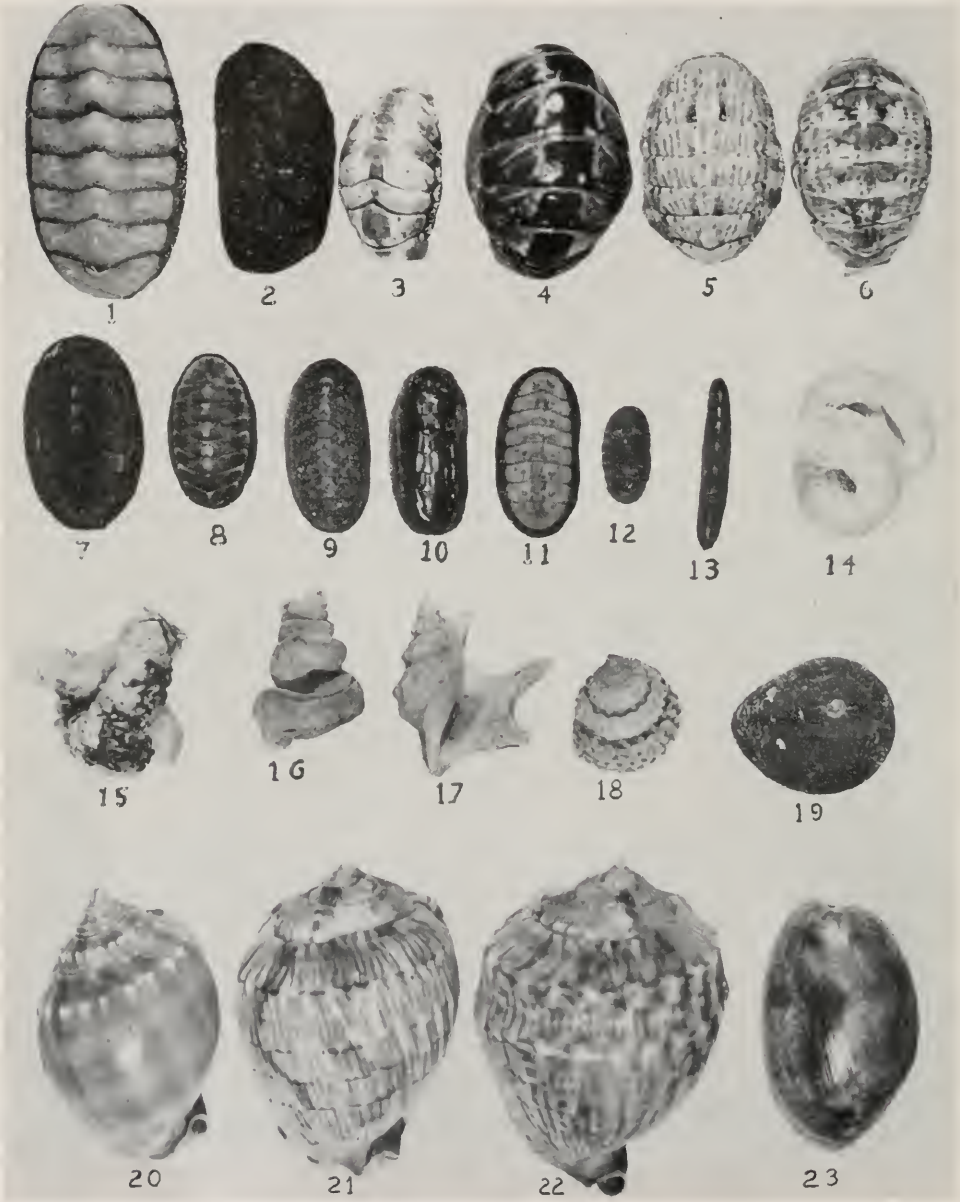

PLATE 55

1. **Chiton tuberculatus,** L. Panama. A handsome grayish form, with snakeskin mantle. Interior is sea green. You will see them clinging to the rocks where the surf is heavy. 2½" 75c

2. **Callistochiton pulchellus,** Gray. Gulf of California. The shell is dark colored, plates are richly lined in fan shape. Interior greenish. 2" 50c

3. **Chiton squamosus,** L. West Indies. A rugged chap, the plates above usually covered with incrustations or bryozoa. Interior is pale greenish. One of the most common forms. 2" 25c

4. This is a specimen of the same shell, buffed down to the hard shell. You would never recognize the rich black color bordered with white and brown. Interior black and green. It is now a beautiful specimen for the cabinet and well worth the price. 3.00

5. **Chiton marmoratus,** Gmel. Bahamas. In its natural state the back is adorned with faint stripes on a gray background. Mantle like snakeskin. Interior rich green. 2" 50c

6. This is the same shell richly buffed. The back is now a rich green white and some faint stripes. A real beauty. 1.50

7. **Ishnochiton contractus,** Rve. Also shown on another plate.

8. **Ishnochiton lineolatus,** Blv. South Australia. A handsome grayish brown shell with very fine lines. Mantle slightly darker brown. 1¼" 50c

9. **Ishnochiton cariosus,** Pils. South Australia. The pattern is somewhat like preceding species, slightly narrower, the mantle light brown. 1¼" 50c

10. **Ishnochiton torrei,** Iredale. South Australia. Top two shades of brown, mantle still lighter, some specimens show red color. 1¼" 50c

11. **Ishnochiton contractus,** Rve. So. Australia. The main body is light gray with faint markings and mantle is a darker brown. 1¼" 50c

12. **Ishnochiton tricostalis,** Pils. So. Australia. This little fellow is hard to describe. The back is richly adorned with lines in form of triangle and the narrow mantle is barred. 1" 50c

13. **Stenochiton longicymba,** Blv. So. Australia. One of the dainty forms of this great family, very narrow with glossy back. Looks more like a worm than a sea shell. Interior is dark. 1½" 50c

14. **Vermetus filosus,** Rve. Japan. It just naturally grows flat on some smooth rock or shell. It frequently uses the host as part of its body whorls and when removed shows many holes. Uncolored. 1½" 50c

15. **Vermetus novahollandiae,** Rouss. Australia. It just naturally grows in a twisted mass, twining its coils around one another. Uncolored. 2" 50c

16. **Tenegodus (Siliquaria) anguina,** L. Philippines. One of the finest of the genus but seldom two alike in form. The top of the whorls have an opening the entire length. Uncolored. 2" 1.50

17. **Aporrhais pes-pelicani,** L. Also figured on another plate.

18. **Echinella coronaria,** Lam. Philippines. All of the shells of this genus resemble Tectarias, being trochiform, nobby, and often richly adorned with color, as is this species. 1" 25c

19. **Calliostoma meyeri,** Phil. Tasmania. Also figured on P.ate.

20. **Cassis bandatum,** Ire. Australia. This shell much resembles glauca, which is found all over the Pacific area. The specimens sent me come from Australia are faintly spotted, smooth, shiney, lip flesh-colored. Top of each whorl has a row of small tubercles. 2½ to 3" 1.00

21. **Cassis plicata,** L. Australia. A very handsome glossy shell with vertical flat ridges, five faint circular stripes of brown and wider irregular vertical stripes same. Top of shell has one row of very small knobs. Lip has five narrow bands. The shell is not very common in collections in this country. 3" 2.50

22. **Cassis bicarrinata,** Jon. Australia. Superficially this shell resembles the previous species but there are prominent distinctions. It has two rows of knobs on upper part of last whorl. The vertical lines are less pronounced and there are wavy brownish markings throughout. Specimen figured was 3". 2.50

23. **Bulla tenuissima,** Sow. South Australia. One of the largest species of the genus I have seen. Usually 2" or more. The back has wavy dark markings and the top has open umbilicus 50c

PLATE 56

1. **Thais bufo,** Lam. Queensland. Spiral lines on last whorl with two rows of small knobs. Outer lip edged with brown, interior flesh color. An attractive shell of this genus. 2" 50c

2. **Latirus belcheri,** Rve. Japan. Has a row of pointed nodules on each whorl. Ground color whitish with longitudinal wide stripes of black usually somewhat zigzag. An attractive shell. 2" $1.

3. **Siphonalia filosus,** Kuruda. Japan. An elongated shell with slight nodules in middle of each whorl and longitudinal markings of light brown. About 8 whorls. Aperture reflexed backward. 2½" $1

4. **Ranella pulchra,** Gray. Japan. The Winged Ranella is a good common name. The five whorls have perpendicular nodules and the two wings encircle the aperture. 2" $1

5. **Turritella flammaulata,** Kien. Gulf of California. The shell is elongated as are all of this genus, with a ridge separating each of the 12 whorls. Of a grayish color and slightly wrinkled. 2½" 75c

6. **Murex eurypteron,** Rve. Japan. This shell is very closely allied to **aduncus** and it is very hard to separate them. Of about the same size and number of winged varices. A remarkable species of a little over 2" $1

7. **Conus ione,** Fult. Japan. The shell has only slight markings of brown and very closely resembles **sieboldi.** The apex is concave between each whorl. 2" $2.00

8. **Siphonalia spadicea,** Rye. Japan. Similar in form to No. 3. The last whorl has small circular ridges and upper whorls have vertical ridges. Uncolored. 2" 50c

9. **Ranella corrugata,** Perry. Japan. The shell is completely covered with small nodules, usually a smaller row between, one higher. Aperture modulated, white. 1½" 50c

10. **Turris cosmoi,** Sykes. Japan. Each whorl has a row of small nodules in the center and between the whorls is a low row of pointed nodules of brown. A very dainty uncolored shell of 2". 50c

11. **Turris fascialis,** Lam. Japan. Each whorl has a row of small nodules and the lower part of the last whorl three rows. The nodules are light brown. 2½" 50c

12. **Turbo stenogyrus,** Fisch. Japan. A small beautifully mottled shell. Longitudinal alternate stripes of white, and brownish, granular but smooth surface. 1½" 50c

13. **Aporrhais pes-pelicani,** L. East Indies. A very unique and common shell now used in vast quantities in the novelty manufacturing business. It is not unusual to see a whole barrel full in a wholesale house. The peculiar fingers do not appear on the young shell. 1¾" 25c

14. **Siphonalia fusoides,** Rve. Japan. Typical form of many of the smaller shells of this genus, spiral lines, base turned back. 1¾" 50c

15. **Latiaxis lischkeana,** Dkr. Japan. This beautiful shell much resembles **Japonicus,** is white, but the row of flat spines at edge of each whorl, curve upwards. The body whorl is covered with rows of very tiny spines. 1½" $5

16. **Latiaxis pagoda,** A. Ads. Japan. This little fellow of one inch has rows of upturned spines on each whorl. The spines are flat. Practically uncolored. $2.00

17. **Murex modesta,** Fult. Japan. A fine small shell with three thin wings, drab color and almost round aperture. 1¼" 75c

18. **Murex penchinati,** Crs. Japan. A small shell of the form of our Florida **rufus** and **salleanus.** Some are reddish and some black. Usual specimens 1½" 50c

19. **Pecten singaporensis,** Sow. Queensland. The shell has 18 prominent rounded ridges and is mottled with reddish, brownish and white. Usual specimens 1½" or a little larger. 50c

20. **Ishnochiton proteus,** Rve. New South Wales. A neat little species with a light streak down the back and lighter on edge. 1¼" 50c

21. **Ovula volva,** L. Japan. Often called the Weaver Shuttle Shell, as each end is elongated like the shuttle used in weaving cloth. Aperture is elongated and oval on edge. Usually flesh-colored in fresh specimens and ranges from 2 to 4 inch. $1

22. **Turris coffea,** Smith. Philippines. A dark shell, upper part of each whorl is black and lower part lighter colored, with circular ridges throughout. 2½" $1

23. **Ishnochiton virgatus,** Rve. Victoria, Australia. The back is light colored and mottled, with darker edge. 1¼" 50c

24. **Dentaliem vernedei,** Hanley. Japan. This is one of the largest varieties of the genus, which consists of several hundred species throughout the world. The East and West Coast of North America have a large number of species, mostly 1 to 2 inch, many highly polished and all have a hole in each end. This species is white and ranges from 4 to 5 inches in length. $1

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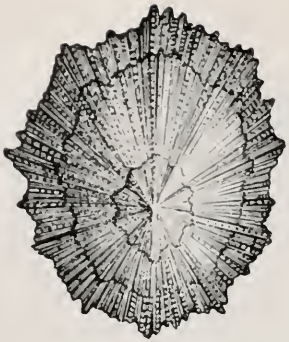

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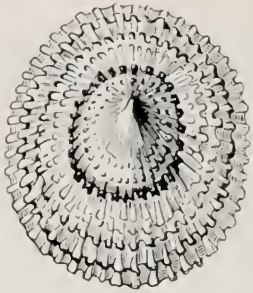

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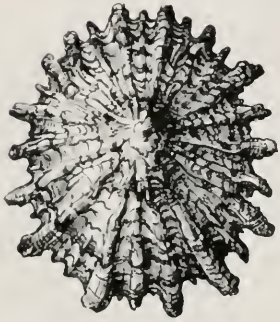

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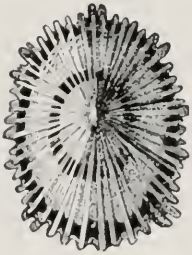

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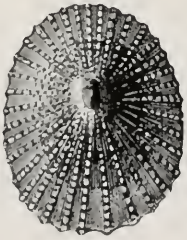

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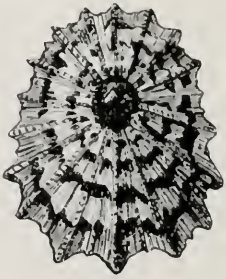

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PLATE 57

1. **Patella kermadecensis,** Pils. Kermadic Island, north of New Zealand. A very fine large species, mostly of a yellowish color. It is one of the largest and heaviest forms in the world. There are some 250 known species in the genus but few the size and weight of this one. The shell is hard and takes a fair polish. 5" 3.00

2. **Patella neglecta,** Gray. Australia. Rather flat with few marginal points and many fine ribs. Found in the coral reefs. Not very common. 2" 1.00

3. **Patella nigrosquamosa,** Dkr. Japan. A light colored beauty, as cut indicates. There are many rows of small scalloped edges of a yellowish color with darker circles. 2" 75c

4. **Patella ferruginea,** Gmel. Mediterranean Sea. The back is of dark color and covered with ridges or ribs that are mottled. The edge terminates in a row of irregular spines. 2" 75c

5. **Patella granatina,** L. Cape of Good Hope. Rather thin with scalloped edges and finely ringed with dark stripes. This is one of the splendid forms of the region, of which there are many species. 3" 75c

6. **Patella longicosta,** Lam. Cape of Good Hope. A fine shell with sharp arms extending out like a star. It is white, shaded with darker colors. 2 to 3" 75c

7. **Patella cretacea,** Rve. Tahiti. A finely ridged shell with dark color around the edge. There are many Patella through the East Indies but New Zealand and South Africa seem to be particularly rich in splendid forms. 1" 5.00

8. **Patella granularis,** Rve. South Africa. A rather small shell of almost black color and ornamented with ribs that are divided into knobs. Fairly common. 1½" 50c

9. **Patella caerulea,** L. North Sea. A medium sized shell that is quite variable being mostly shades of gray and darker colors. Rather common through the region. 1½" 50c

10. **Patella oculus,** Born. South Africa. Of rather flat form, thin and has dark circular stripes. It is considered one of the finest of the genus. My collector in Natal had trouble in detaching them from the rocks as the shell would break before it would loose its hold. Finally a thin bladed knife had to be used. 3" 75c

11. **Patella testudinaria,** L. Philippines. One of the fine large oval forms with dark mottled surface. It is usually rather smooth, thick and an outstanding species. 2 to 3½" 1.00

12. **Patella radians,** Gmel. New Zealand. Rather thin, mottled with brown, the color showing through the shell. It is quite variable some markings being in splashings, others in lines and stripes. 2" 75c

13. **Patella plumbea,** Lam. Senegal. A neat little shell of rather distinct form. It is ridged around the edges with light smooth space in center. A common species from Indian Ocean region. 1½" 75c

14. **Scutus ambiguus,** Chem. New Zealand. A pure white plate-like shell with oval back. There are 20 species in the genus most of which are white and of the form of this one, varying in size and slightly in form. 2" 1.00

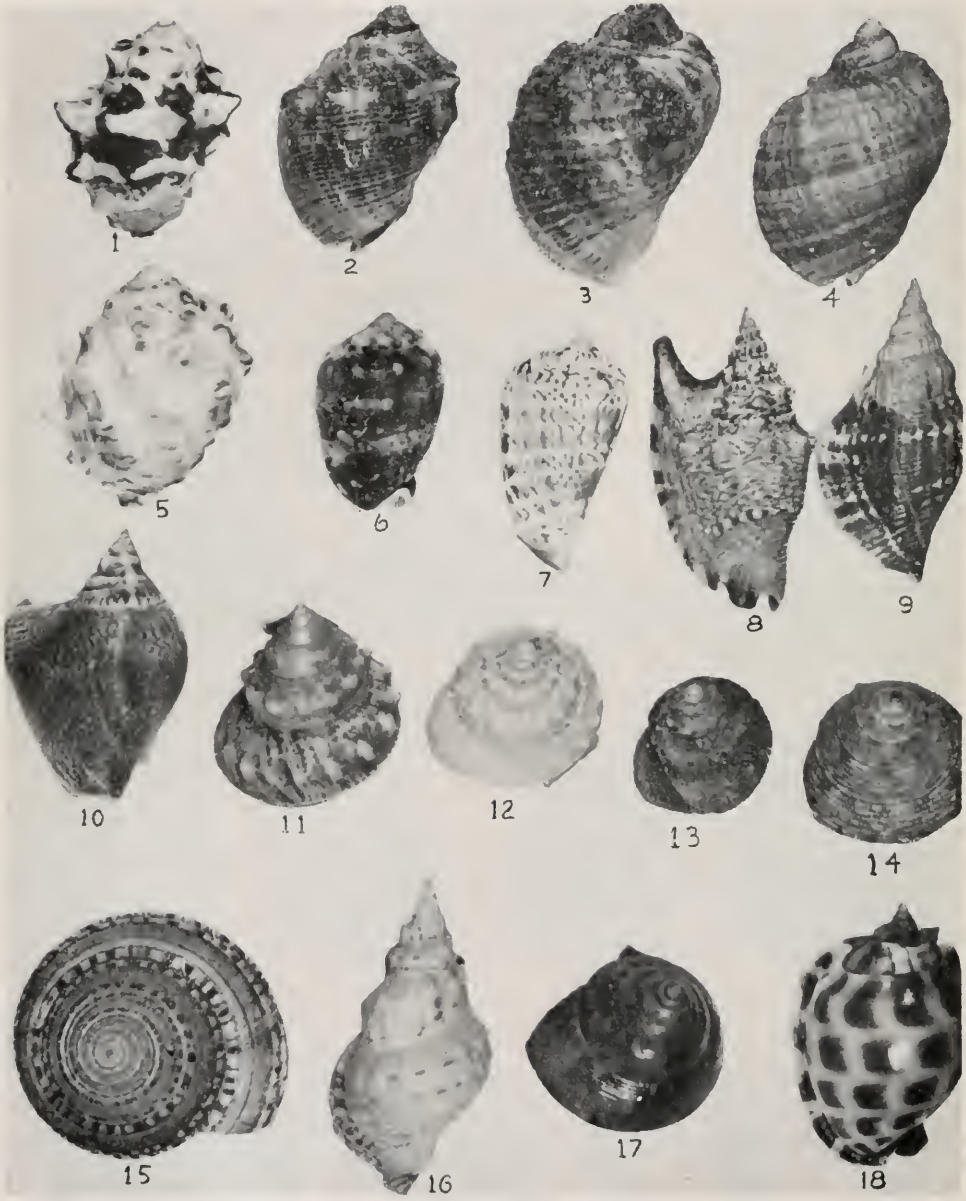

PLATE 58

1. **Thais pica,** Blv. Philippines. The shell has two rows of pointed knobs on last whorl and one row above. Ground color white, richly adorned with jet black markings. Nearly 2". 50c

2. **Thais rudolphi,** Lam. Philippines. This is a handsome shell if you can get a specimen that cleans up well. It has two rows of faint knobs on last whorl. Entire shell has circular tiny white lines. Aperture edged with brown, columellar part flesh colored. 2" 1.00

3. **Thais haustrum,** Mart. Australia. The remarkable thing about this shell is its aperture which in specimen figured measured 2" and the entire shell 2½". The general color is brown, edge of aperture well marked, columellar section white. 75c

4. **Thais succincta,** Mart. New Zealand. The shell is uncolored, has vertical striae and circular ridges. Aperture white. 2" 50c

5. **Thais mancinella,** L. Philippines. The whole shell is ornamented with flat pointed knobs. Ground color mostly white. Aperture a rich yellow. 2" 50c

6. **Cassis crumena,** Brug. Gulf of California. The shell much resembles the Cameo Shell with rows of small knobs of russet color, aperture white, upper part narrow and wider below which is one of its main distinctive features. I suspect it lives below tide lines as it is not very common. Average size 2". 1.00

7. **Strombus mauritianus,** Lam. East Africa. A narrow elongated shell covered with russet markings, usually arranged in circular rows. Lip notch is prominent. Always used to be considered fairly scarce but since war has appeared on the market in fair quantity. Nearly 2". 50c

8. **Strombus melanostomus,** Sow. Philippines and Pacific generally. A very attractive shell. Back has row of knobs in upper section and less below. Upper part of aperture terminates in a spire of a half inch. Lower section reflexed backwards with prominent notch. The whole aperture richly adorned with black and yellow markings. 2½" 1.25

9. **Strombus japonicus,** Rve. Japan. An elongated pointed shell, upper whorls uncolored, last whorl broadens out, shaded brown with two faint circular rows of white. The upper part of the lip extends upward on the two previous whorls. Aperture white. 2½" 50c

10. **Strombus isabella,** Lam. Philippines. A fat chunked rounded shell of light brownish color with irregular markings throughout. Upper part of lip thick and rounded, thin below at notch. 2" 50c

11. **Lischkeia argenteonitens,** Lisch. Japan. A thin deep water shell with row of small knobs on each whorl, fading out entirely in apex. Aperture thin. The whole shell has a brilliant sheen, common in very deep water shells. 2" 2.00

12. **Turcicia coreanis,** Lam. Japan. Somewhat similar to preceding shell to which it is closely allied. It has a tiny row of knobs, another at sutures, which continue to apex. Base of shell flat with tiny circular lines. It is a very deep water shell and shows some sheen. 1½" 2.00

13. **Turcicia crumpii,** Lisch. Japan. Smaller than preceding species has only faint knobs, but covered with spiral lines, with base same. 1½" $2

14. **Calliostoma meyeri,** Phil. Tasmania. A handsome conical shell completely adorned above and below with circular ridges made up of fine beading. Apex bluish. 1½" $1

15. **Solarium maximum,** Phil. Japan. This genus is also called Architectonica. One of the largest of the genus. It has rows of square spots above and below each whorl at suture. It has no central axis, and umbilicus can be clearly seen to top, each whorl ringed with serrated edge. In the olden days was called the Staircase Shell. 2½" $1.50

16. **Eugyrina subdistorta,** Lam. Tasmania. This genus name used to be a subgenus of Tritons or Cymatium. The shell has characteristics of both a Triton and Distorsio. It is of light color with shadings of brown, faint circular rows of knobs. 2½" $2

17. **Calliostoma haliarchus,** Mke. Japan. The shell forms a perfect shiny cone terminating at a point at apex. The whorls have faint circular lines and base the same. The naturally smooth shiny surface makes it a very attractive shell. 1¾" $1.50

18. **Cassia areola,** L. Pacific generally. Shell figured is from Australia. It is generally smooth and completely covered with circular rows of square patches of brown. Lip strong reflexed and has usually inner row of small sharp teeth. 2 to 3" 50c to $1

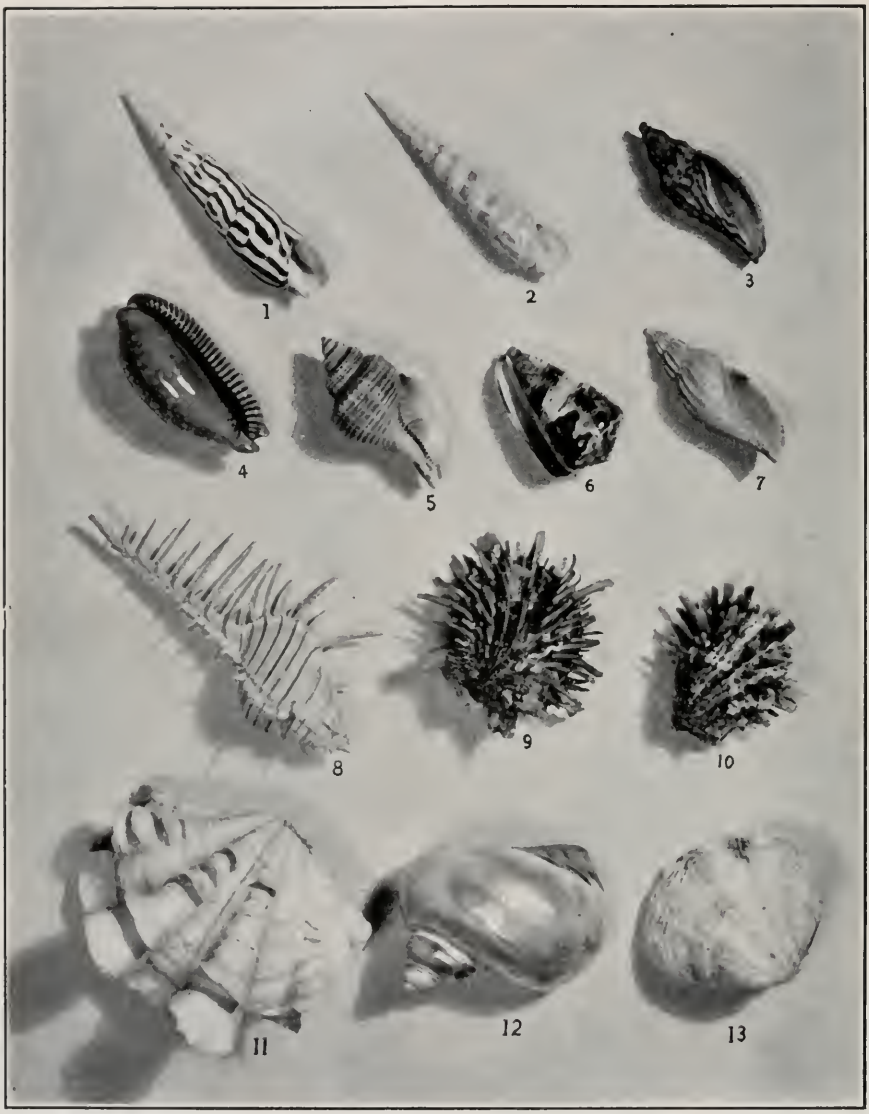

PLATE 59

This plate was included in one of my earlier editions and is only included here for the reason it illustrates some very nice shells. Some of them are likely duplicated on other plates where they belong.

1. **Terebra strigata,** Sow. Striped Terebra, Panama. Brilliant brown stripes on a yellowish-white background.
3 to 4" 1.00

2. **Terebra robusta,** Hinds. Mottled Terebra, Panama. A mottled shell of brown and white, considered quite scarce.
3 to 5" 1.00

3. **Voluta rupestris,** Gmel. Japan. Zigzag brown stripes on a light brown background. 3 to 4". See Plate 27. 2.50

4. **Cypraea cervinetti,** Kien. Kieners Cowry, Panama, on Pacific side only. Very similar to the Florida "cervus," but usually more elongated, with much darker teeth. A richly colored shell. 2½ to 3½". See Plate 30. 1.00

5. **Cymatium weigmanni,** Ant. Weigmans Triton, Panama. Deep brown shiny ridges, with white between. It is a rather scarce shell. 2 to 3" 1.00

6. **Conus purpurascens,** Brod. The Purple Cone, Panama. Of a rich bluish-purple, with white splashes of color. Very attractive. 2 to 3" 1.00

7. **Voluta hirasei,** Pils. Pilsbry's Volute, Japan. Whorls ridged lengthwise, russet color. 3½" 6.00

8. **Murex troscheli,** Lisch. Japan. One of the largest of the long-spined Murex, ranging 5 to 6". Lined with brown. Three rows of spines. 2.50

9. **Spondylus coccineus,** Lam. Philippines. Thorny Oyster, Philippines. These shells have short spines in great profusion. Colors are orange, purple, red and intermediate shades. 2 to 4" 2.50

10. **Spondylus japonica,** Japanese Thorny Oyster, Japan. Numerous flat spines of a purplish color. 2 to 3" 2.00

11. **Tridacna squamosa,** Lam. Furbelow Clam, Philippines. Illustration is a young shell, which are more attractive than old specimens. Ground color is greenish-yellow, reddish and occasionally lavender. Furbelows are usually white. Old specimens a foot or more long are about smooth.
3 to 4" 2.00 and up

12. **Turbo marmoratus,** L. The Green Snail, China Seas. The illustration is a specimen polished down to the pearl, only the base showing some green. Very brilliant iridescent colors. 3 to 6". Also described on Plate 40. 5" 5.00

13. **Tridacna crocea,** Lam. Baby Giant Clam, Philippines. The common name mentioned is the one used by the natives but it is not really a baby shell of the Giant Clam. Colors reddish and white. 2 to 3".

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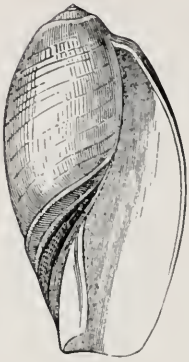

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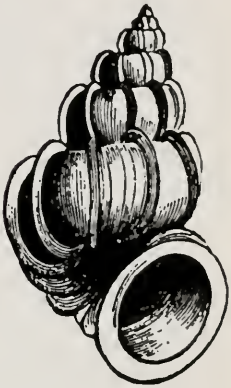

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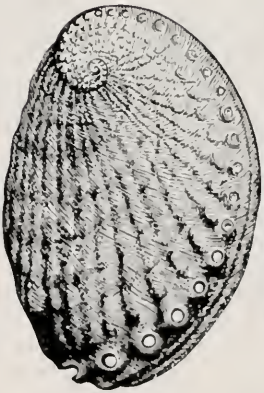

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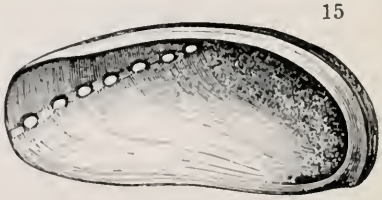


PLATE 60

1. **Ancilla marginata,** Lam. Tasmania. A pointed species of brilliant polish with splashes of chestnut. The aperture is peculiar shape and has high spire. 1½" and not very common. 1.00

2. **Ancilla glabrata,** L. Gulf of Mexico to Yucatan. Of a rich golden yellow with an unusual brilliant natural polish that fairly glistens. The aperture has peculiar folds. All of the Ancillas have a neat habit and are closely allied to the Olivas. 2 to 2½" 1.00

3. **Ancilla ventricosa,** Sow. Red Sea. It is of a rich golden yellow throughout. Not common. 1" 1.00

4. **Ancilla australis,** Sow. Australia. Of a rich shade of brown, high polish, it is an attractive small shell of 1". There are 50 species of this genus in the world. 50c

5. **Astraea rugosum,** L. Mediterranean Sea. Of drab color it is a fairly common species of this region. The surface has tiny ruffles as shown in cut. 2" 75c

6. **Ancilla rubiginosa,** Swain. China Seas. It is of a cinnamon brown highly enameled. Lighter brown at suture. Not common. 2" 1.25

7. **Ancilla tankervillei,** Sow. Brazil. A richly enameled high colored shell and is quite rare and only occasionally seen. 2" 1.50

8. **Ancilla mauritiana,** Sow. Mauritius. It is of a clear yellowish color, quite highly polished and has a very wide aperture. Only a few other species are similar. 1½ to 2" 1.00

9. **Epitomium (Scalaria) pretiosa,** Lam. China Seas. The so-called Precious Wentletrap you will find figured in the oldest shell books as one of the treasures of ye olden times. While it is more common today it has never been called a real common shell, as it lives below the tide lines. Recently I have had numerous fine specimens sent me from around Brisbane, Australia. The collector says he finds many specimens on the beach but only very rarely one alive, with the mollusk. Average size 1¾". 4.00

10. **Haliotis gigantea,** Chem. Japan Sea. One of the largest species of the genus but seldom as thick as some of the other forms, hence it has never known the commercial importance of the California coast forms. Lives on the rocks as do the others. Of very rich dark color inside. Back usually covered with many forms of incrustations. 8" or more. 1.00

11. **Haliotis rugoso-plicata,** Chem. Australia. Back is covered with numerous corrugations and interior white. A neat shell not at all common. 2 to 3" 1.00

12. **Haliotis midae,** L. Australia. Back is covered with folds. Interior mostly white. It is not common in collections. 3 to 4" 1.00

13. **Haliotis pulcherrima,** Mart. Polynesia. A small species with very distinct shell pattern. Interior white. About 1". 75c

14. **Haliotis japonica,** Rve. The back of the shell has numerous folds and nicely marked with shades of yellow and brown. A neat small 2" shell. 50c

15. **Haliotis asinina,** L. Philippines Seas. A narrow shiny shell quite thin and one of the very few naturally glossy forms. It is quite common, and fine specimens can usually be had for a small price. 3" 50c

PLATE 61

1. **Pectenculus maculata,** Baird. Gulf of California. One of the finest marked shells of the genus being completely covered with zigzag markings of deep brown. 2½" 1.00

2. **Crassatella kingicola,** Lam. Tasmania. The shell is covered with a dark periostracum, which if removed would show flesh color. This genus has shells that range from 1 to 4". 2½" 1.00

3. **Mactra obesa,** Desh. Queensland. The shell is mostly uncolored, some red patches on the umbones. 2¼" 50c

4. **Lucina exasperata,** Rve. Philippines. The circular white shell is finely reticulated, interior edge is often lined with pink. 2" 50c

5. **Callista erycina,** L. Australia. The handsome shell is richly lined and shaded with purple, interior also shows some of that color. 2½" 1.00

6. **Callista aurantiaca,** Sow. Gulf of California. A shell of natural brilliant polish, as are most all of this genus. Main color yellowish-brown. Some are mostly yellow. 2½" 1.00

7. **Cytherea chemnitzi,** Hanley. West Australia. A very beautiful shell with thick upraised ridges, thickly scalloped. Only faint shadings of brown. 2½" 1.00

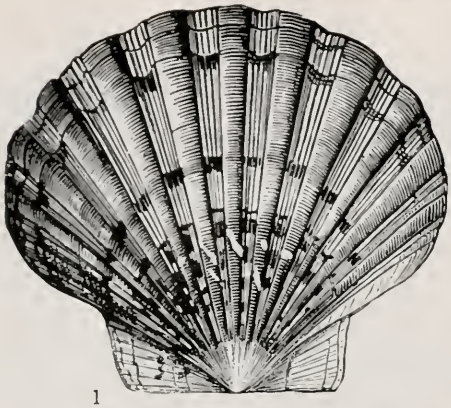
8. **Cardium flavum,** L. Queensland. A rather flat elongated shell with many fine rounded ribs, shaded with yellowish-brown. Interior partly yellow. 2" 1.00

9. **Cardium rusticum,** L. Malta. The shell is finely ridged with shadings of brown throughout. 1½" 50c

10. **Cardium setosum,** Redfield. Australia. A very dainty shell, with faint ridges and pinkish-yellow color. 2" 75c

11. **Cardium procerum,** Sow. Gulf of California. A solid shell with prominent rounded vertical ridges which are faintly marked with brown. 2½" 1.00

12. **Cardium elatum,** Sow. Gulf of California. A fine, smooth, yellow shell with faint vertical lines throughout. 2½ to 3" 1.00



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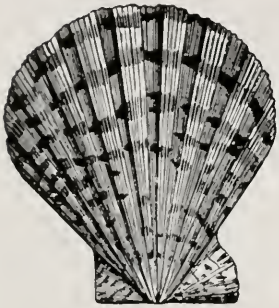

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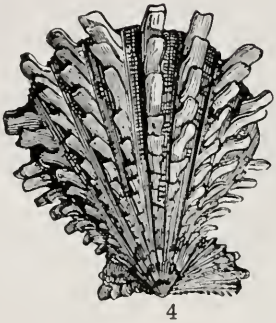

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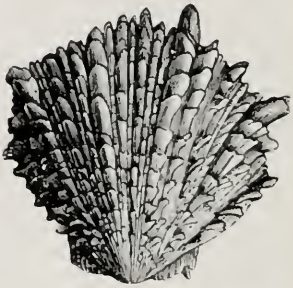

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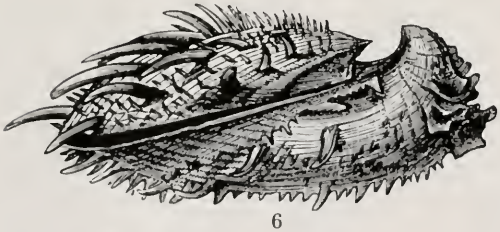

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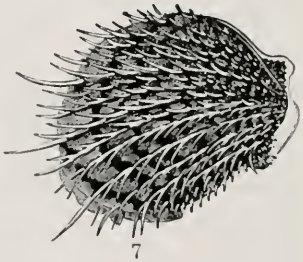

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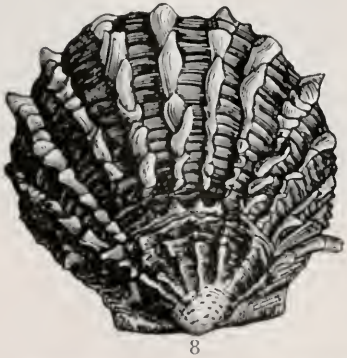

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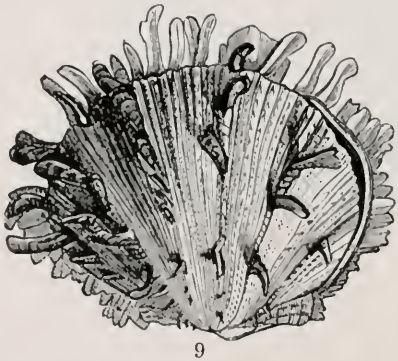

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PLATE 62

1. **Vola (Pecten) Maximus,** L. The Great Scallop. North Sea. A very large 6″ shell of the usual shape with fluted back. The convex side has been shipped into this country in quantity for baking fish or oysters and serve in shell. On the East Side of London you will find quantities of this shell in the market during the month of December of each year where it is sold for food. Of a russet-red color. 5″ 1.00

2. **Amussium Japonicum,** Gmel. Japan. The Sun and Moon Shell. Fairly common and is shipped into this country for commercial use. One valve is red and the other yellow. Thin almost circular. The two valves only meet at top and bottom. There are 22 species in the genus. 4 to 5″ 1.00

3. **Pecten tigris,** Lam. Philippines. This handsome species is finely ridged and adorned with splashes of reddish-brown. Very attractive. 3″ 1.50

4. **Pecten tegula,** Wood. Australia. A thin shell ornamented with ridges and spines. One valve is more flat than the other. The shades of rosy-brown are in waves of color. 2″ 1.50

5. **Spondylus crassiquama,** Lam. Lower California. A solid shell with stubby spines that come in all shades of color such as white, red, purple, orange, etc. Not common. 4″ 5.00

6. **Spondylus avicularis,** Lam. West Indies. In the young stage they come in shades of color, but as they attain a large size they are white. I have had specimens up to 10″, one of the largest species of the family. There are over 80 species in the world. All attach themselves to rock or coral, where they remain for life and are able to only move one valve, the upper, during life. 5.00

7. **Spondylus hystrix,** Bolt. (Nicobaricus, Sow.) Nicobar Ids. A small flat species of reddish-yellow color covered with short sharp spines. It is always quite difficult to detach such a shell from the coral. 1¼″ 2.50

8. **Spondylas ducalis,** Bolt. Philippines. A fairly round fat shell of a brownish color. The spines are always short and stubby. Quite variable in form and you seldom find two alike. 2 to 3″ 1.50

9. **Spondylus gaederopus,** L. Mauritius. A very variable species of purple or other shades. The spines are short or none at all. Not as heavy as many other forms. 4 to 5″ 2.50

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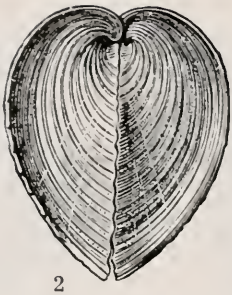

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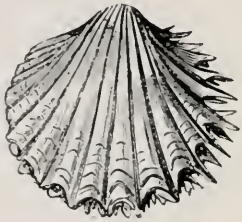

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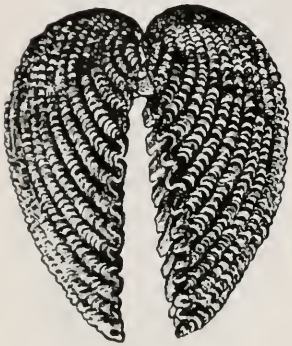

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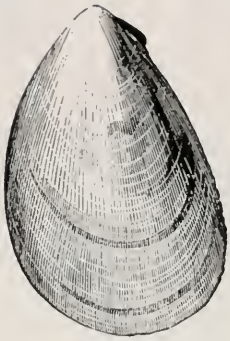

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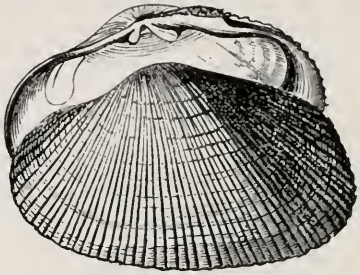

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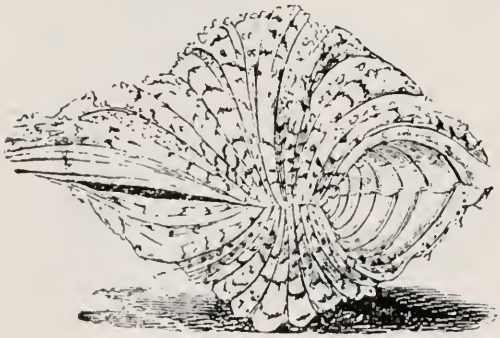

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PLATE 63

1. **Cardium auricula,** Forsk. Philippines. A very peculiar shell of a grayish-white color, with ridges. The formation of the hinge and curved cavity around same is very unique. 1½" 2.00

2. **Cardium cardissa,** L. Nicobar Ids. A remarkable shell, pure white, concave on one side and convex on other. The form of the valves is exactly the reverse of the usual shell of this genus. 1½ to 2" 1.00

3. **Cardium ringens,** Chem. China. This shell is remarkable in that while the valves fit perfectly at one end, at the other they barely touch at their points, which are extended about one-eighth of an inch, leaving small openings. It would be interesting to know the practical use of same. 1½" 1.50

4. **Cardium consors,** Sow. Panama. A real Heart Shell of remarkable form of sculpturing. It is completely covered with little cup-shaped ridges arranged in regular rows. Color a rich pink shade. Common on mud flats. 3" 1.00

5. **Cardium oblongum,** Chem. Greece. The shell is of a yellowish-white and has a very thin periostracum over part of the surface. It is common and much used by the inhabitants who live along the shores for food. 2½ to 3" 1.00

6. **Asaphis deflorata,** L. Bermuda and other parts of the world. The prevailing color is white tinged at one end with purple but as all of the shells of this genus are very variable, there are usually other color shades. There are only seven known species but they include hundreds of color combinations. 2" 50c

7. **Hippopus maculatus,** Lam. East India Clam, Philippines and East Indies generally. It is a finely mottled, heavy shell and has been shipped into this country in vast quantities for several decades. It is usually sold in various sizes ranging from 2 to 9". Old and large shells are devoid of color, being usually white or drab, but the younger shells of 3 to 4 years are beautifully shaded with brown. 50c to 6.00

8. **Soletellina biradiata,** Wood. South Australia. It is of a yellowish color and highly polished. The young shell is of a darker color. There are 50 species in the genus and they are a very colorful lot as a whole. 2½" 1.00

9. **Cardium unedo,** L. Philippines. Here we have a handsome shell that seems to be a sort of intermediate between other species. It is deeply ridged with yellowish-white, the ridges being barred with red. 1½ to 2½" 1.00

10. **Cyclina chinensis,** Chem. Japan. Although this shell would be classed as smooth it shows concentric ridges which are adorned with a bluish shade. Interior pure white. There are 12 known species but I have seldom had more than one or two. 1½" 75c

11. **Chama lobata,** Brod. West Indies. A small species of a drab color of very unique form, and when well cleaned makes a fine specimen. 1½" 1.00

12. **Corbula sulculosa,** A.Ad. Hong Kong. A trim little shell, thick, smooth, shiny and well mottled with brownish. There are some 90 species scattered over the world and they are all as interesting as this one. Live under rocks at low tides. 1" 35c

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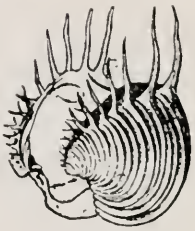
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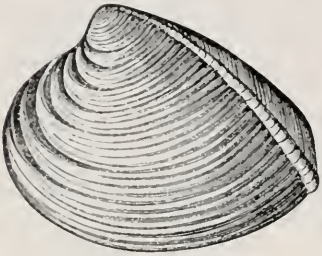
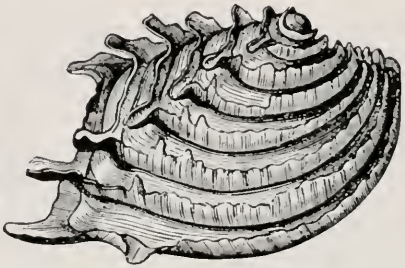
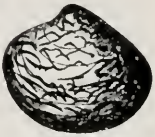

4


5

6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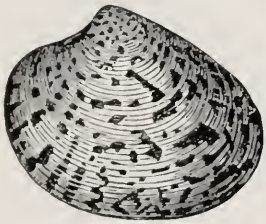
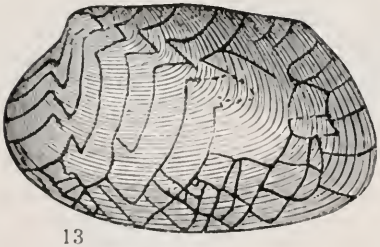

8

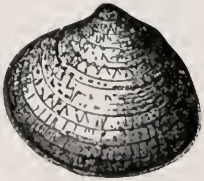
9

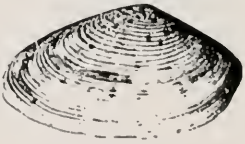
10

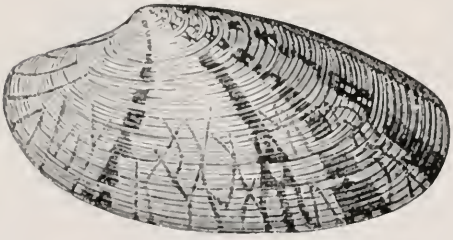
11

12


13


14


15


16

17

18

PLATE 64

1. **Meretrix (Cytherea) petechialis,** Lam. China. The species has a natural polish and covered with chevron markings. Ranges from shades of light brown to white. Very common edible species. 2 to 3" 50c

2. **Lioconcha castrensis,** L. Ceylon. It is richly adorned with splashes of rosy-brown on a white background. There are about 28 species in the genus and all have brilliant colors and markings. 2 to 2½" 1.00

3. **Hysteroconcha lupinaria,** Less. West Indies to Panama. It is a true Venus-like shell adorned with spines at one end. A very unusual species. 2" 1.00

4. **Hysteroconcha rosea,** Brod. West Coast Central America. A rather flat shell with fine concentric ridges and smooth base. Of a light shade of rosy-pink. 2¼" 1.00

5. **Venus lamellata,** Lam. So. Australia and Tasmania. It is pure white and ornamented with at least six frills which curve backward and have distinct pink shade on under side. Very attractive. 2½" 1.50, 3.00

6. **Sunetta scripta,** L. Ceylon. A small shell of brilliant polish and many shades of color. It is impossible to find two pair exactly alike. Some are pure white, others lavender, gray, brown with zig-zag markings. ½" 50c

7. **Lioconcha picta,** Lam. Viti Ids. This species is smooth and covered with splashes and zigzag markings of a shade of light brown. Very attractive. 1½" 1.00

8. **Lioconcha tigrina,** Lam. New Caledonia. It is rather triangular in shape with markings of different shades of brown. Some shells are much darker than others. 1½" to 2" 1.00

9. **Dosinia juvenilis,** Chem. Indian Ocean. Usually quite round, and adorned with shades of light brown. The Dosinies are a large group of shells covering 140 species and ranging from the big white **D-ponderosa** which attains 5 to 6" down to little fellows of 1" or smaller. They are world-wide in distribution. Usually white, there are some forms fairly well colored. 75c

10. **Dosinia circinaria,** Desh. Victoria, Australia. It is of a drab color with fine lines over the entire surface. Almost circular. 2" 50c

11. **Circe divaricata,** Chem. Philippines. A solid shell with concentric ridges. The color pattern is splashes of different shades of brown with dark patches at hinges. 2" 50c

12. **Meretrix tripla,** L. West Africa. A small triangular species not so highly colored as some of the other of the genus, but a fine smooth natural polished shell. 2" 50c

13. **Paphia (Tapes) litterata,** L. Philippines. The Tapes as we used to call them are fairly common over the tropical world. This shell is of a faint reddish-yellow color and covered with lines. It is very variable and lines are not regular in form. The shell of Tapes is quite brittle. 2½ to 3½" 50c, 1.00

14. **Circe scripta,** L. Philippines. It is not so thick as some other species but it has the concentric ridges and splashes of reddish-brown. 2" 50c

15. **Paphia (Tapes) laterisculca,** Lam. Ceylon. A reddish-brown shell with deep lines. Glossy and attractive. Most of the genus are well ornamented with lines and color. 2" 75c

16. **Paphia papilionacea,** Lam. Indian Ocean. One of the rich fine species of the group. It has the usual ridges and is smooth and natural polish. Color pattern different shades of brown. 3½" 1.00

17. **Venus guidia,** B and S. Lower California. An attractive white shell adorned with ridges that have serrated edges. One of the noble species of the genus. The young and medium size shells are the finest. Lives in mud in quiet water of small bays. 3 to 5" 75c

18. **Lioconcha hieroglyphica,** Conr. Hawaii. A small shell with striking color pattern of light and dark shades of brown. It is thinner than the usual shells of this genus. 1" 1.00

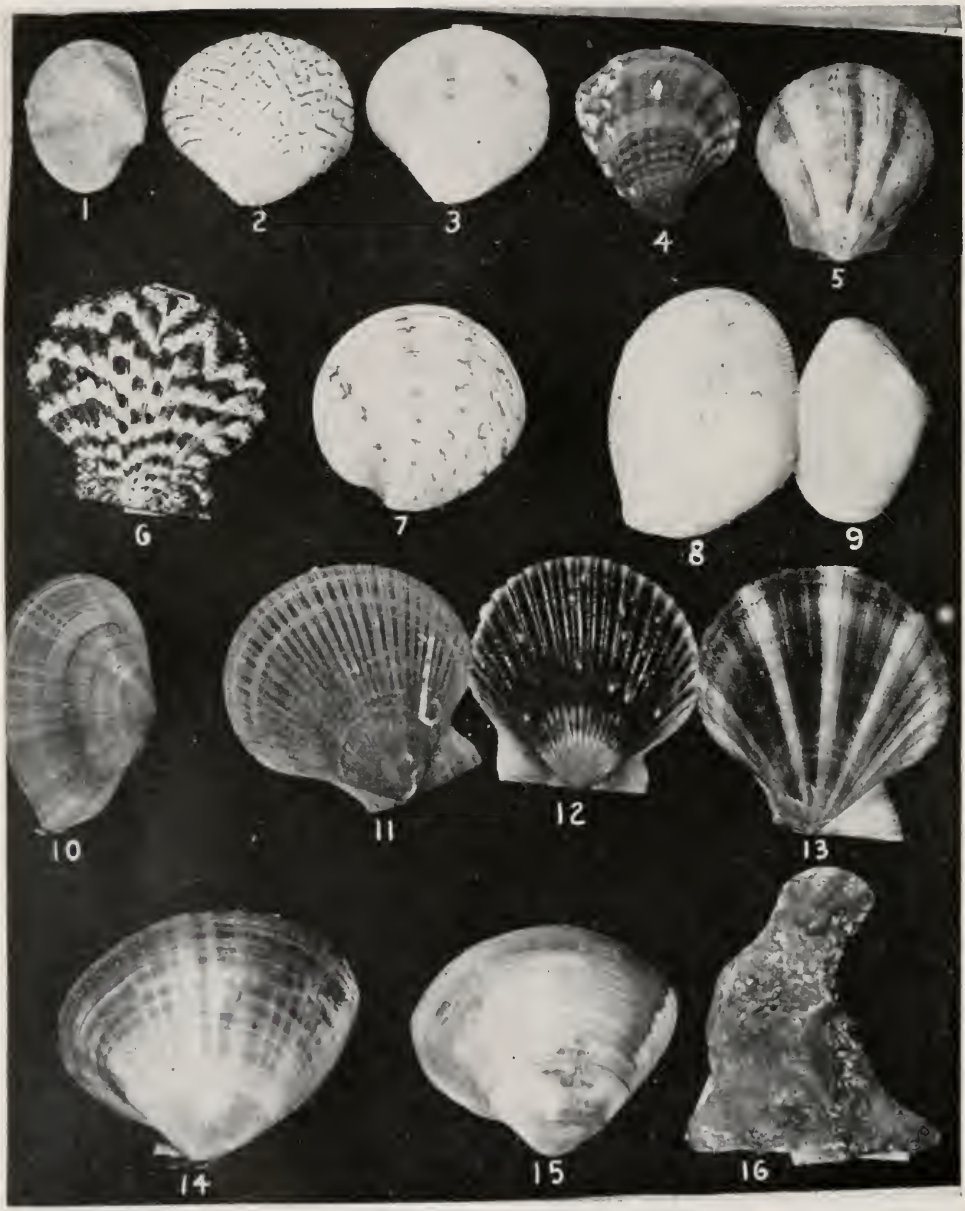


PLATE 65

1. **Sunetta excavata,** Hanley. West Australia. The shell is very shiny and only faintly colored. Interior white. 1¼" 50c

2. **Circe scripta,** Lam. About same size as preceding shell, both valves are covered with zigzag markings of brown on white. Interior only faintly colored. 1½" 50c

3. **Circe rivularis,** Brug. Philippines. An almost circular shell with ringed lines and few faint blotches of color. Shell is depressed at umbones. Interior partly covered with pinkish-lavender. 1½" 50c

4. Species unknown. Gulf of California. It has curved vertical ridges. Main color reddish, white blotches lower edge. Umbones curved. 2" 1.00

5. **Spondylus acanthus,** Mawe. Japan. One of the small forms of this great genus the spines being mere pricks. Shell has 3 vertical bands of reddish color on white background. 2" 1.50

6. **Pecten pallium,** L. Philippines. One of the most beautifully colored shells of the genus, with often zigzag stripes of reddish-brown and white. 2" 1.50

7. **Dosinia victoriae,** Gat. and Gab. Australia. The shell is finely ringed with lines and has 4 vertical rows of brownish spots. 1¾" 50c

8. **Tellina scobinata,** L. Philippines. The shell is completely covered with lines and chevron markings. Mostly uncolored. 2¼" 75c

9. **Tellina staurella,** Lam. Japan. A neat small form that ranges from pure white to vertical reddish stripes. 2" 50c

10. **Tellina virgata,** L. Philippines. One of the finest colored shells of the genus being well striped with reddish and white. 2" 50c, 1.00

11. **Pecten hindsii novarchus,** Dall. Puget Sound. The true hindsii is pale pink and this variety is lavender and very much rarer. 2" 1.00

12. **Pecten gibbus amphicostatus,** Dall. Gulf of Mexico. Upper whorl is brownish-black, lower, yellow. 2" 50c

13. **Pecten hericeus,** Gld. Puget Sound. A handsome finely ridged shell of a rich shade of pink color. 2" 50c

14. **Mactra eximia,** Desh. Queensland. A fine shell with stripes of faint brownish color. 2½" 50c

15. **Mactra trigonella,** Lam. So. Australia. A triangular shell mostly uncolored, with just trace of brown on umbones. 2" 50c

16. **Malleus albus,** Lam. So. Australia. These shells much resemble flat oysters with wings, but some forms have no wings. This shell has short wings and is uncolored. 3" 1.00

PLATE 66

1. **Vola alba,** Lam. So. Australia. The shell has flat ridges shaded with light purple. Interior is lined with purplish brown. 2½" 1.00

2. **Vola laqueatus,** Sow. Japan. The shell has eight ridges on the flat valve and more on convex. Color pattern shade of brown. 2½" 1.00

3. **Pecten bifrons,** Lam. Australia. The shell is rich purple and even deeper color inside. 2" 50c 3" 1.00

4. **Pecten fulvicostatus,** A&R. West Australia. The shell has 7 prominent ribs and is covered with fine vertical lines. Of a brownish shade of color, the interior is lighter. 2" 50c

5. **Pecten radula,** L. Philippines. The shell has about 12 vertical ribs. Upper valve usually dotted with black and lower uncolored. 2" 50c 3" 1.00

6. **Pecten circularis,** Sow. Gulf of California. The type color is dark, but the specimen figured is what I call the reddish variety, being blotched with red and yellow, lower valve may be all yellow. Very variable, some shells showing much more red than others. 2" 1.00

7. **Pecten squamatus,** Gmel. Japan. The shell ranges thru various colors, the back often has flat spiney surface. 1½" 50c

8. **Tellina elegans,** Gray. Sicily. The specimen figured is most all white with some shade of yellow. Very thin. 3" 1.00

9. **Tellina salmonea,** Rve. New Zealand. The umbones are red shading lighter to edge. 2¼" 1.00

10. **Tellina albinella,** Lam. So. Australia. The shell is thin and all red, even darker inside. 1¾" 50c

11. **Callista kingi,** Sow. Tasmania. A richly colored shell with stripes of white and light black. Interior white. 1¾" 50c

12. **Callista planatella,** Lam. West Australia. One of the finest of the genus with natural polished ridges, shadings of brown and white. 2" 1.00

13. **Paphia sulculosa,** Phil. Queensland. A richly marked shell with natural polish, adorned with black and flesh colors. Interior umbone section yellow. 2" 50c

14. **Cardium biagulatum,** Sow. Gulf of California. A small shell of about 1", with prominent vertical ribs and one end flat. 50c

15. **Corbis Sowerbyi,** Rve. West Australia and Philippines. I call it one of the most beautiful of all bivalves. The circular elevated ridges are tipped with pink stripes. There are other bivalves that approach it, but never exceed. 2" and up 2.50

16. **Paphia turgida,** Lam. Queensland. The shell is richly marked with zigzag markings, of shades of brown. Interior has blotch of same. 1¾" 50c

17. **Tellina capsoides,** Lam. West Australia. The shell is almost entirely white, one end flattened, interior white. 1½" 50c

18. **Waldhemia Flavescens,** Lam. Tasmania. A typical roundish Brachiapod with faint ridges on lower half. 1½" 50c

SHELL CABINETS

MOST collectors keep their shells of moderate size and small forms in cabinets of drawers. I give herewith a style I have found very useful.

The cabinet is 60 inches high, 28 inches across the front and 24 inches deep. This style and size just makes 20 drawers as follows: 6 drawers 1⅜ inches, 6 drawers 2 inches deep. Then a ⅞th inch strip across front to strengthen. 6 drawers below the strip 2½ inches deep and 2 drawers 4 inches deep. Have made of white-wood, well kiln dried. The drawers will be light to handle and will forever move freely.

Large shell over 4 inches diameter it is best to place on shelves in a glass cabinet or built in walls. If specimens collect dust as they surely will, they can be washed as often as necessary with warm water and if unusually dirty, use sapolio which will bring back their original fine condition. I have had many types of cabinets but the above, arranged in tiers, I found were best for a private home. In museums, the problem is different, and they often use steel dustproof receptacles, which are of course more expensive.

Suitable trays for specimens I have found to be of the following sizes: 1½ by 2 inches; 2 by 3 inches; 3 by 4 inches; 4 by 6 inches. Two of one size equals the next, and they fit nicely into any size drawer. The depth should be uniformly ¾ inch. They can, when made, be covered with any colored paper desired, glazed or plain. Small or minute shells can be mounted in glass-topped boxes that are round or oblong, using very dark blue cotton. Another way which takes much less room, is shell vials, which can be made by almost any glass manufacturing concern. I have used 3 sizes only, all 50 mm. long, round bottom and they are universally called shell vials. Smallest size 8 mm. thick, next size 12 mm., third size 20 mm. These three sizes will hold almost anything you will want to put in vials. The labels should always be placed inside. I have always used cotton in place of corks, saves room in cabinets and protects shells.

The main advantage of vials is they take up so little room. There are many genera of small shells of which you will only have five to a dozen species, perhaps all in the smallest vials. They will all go in a 1½ inch tray. There may be a genus you will have 200 to 500 vials, and they can be conveniently arranged in trays alphabetically or nearly so.

A tier of cabinets described above in Mr. Webb's Conchological den. There is another similar row to left.

INDEX OF SCIENTIFIC NAMES

Acanthina lugubris, 45
Acanthina spirata, 47
Acmaea digitalis, 47
Acmaea incessa, 47
Acmaea limatula, 47
Acmaea, mitra, 53
Acmaea patina, 52
Acmaea pelta, 47
Acmaea scabra, 47
Acmaea spectrum, 47
Alipurpurea centrifuga, 115
Amiantes callosa, 53
Amphissa columbiana, 47
Amussium japonicum, 133
Ancilla albocallosa, 107
Ancilla australis, 129
Ancilla glabrata, 129
Ancilla marginata, 129
Ancilla mauritiana, 129
Ancilla rubiginosa, 129
Ancilla urasia, 107
Ancilla ventricosa, 129
Anomia aculeata, 33
Anomia ephippium, 13
Anomia simplex, 13
Anomalocardia brasiliana, 33
Anomalocardia cuneimeris, 37
Anomalocardia rostrata, 37
Antigona simpsoni, 23
Apolymetis biangulata, 49
Apolymetis meta, 49
Aporrhais occidentalis, 13
Aca barbata, 37
Arca gradata, 37
Arca inequalis, 33
Arca incongrua, 21
Arca noae, 33
Arca occidentalis, 33
Arca pexata, 33
Arca ponderosa, 15
Arca reticulata, 37
Arca secticostata, 21
Arca transversa, 37
Arca umbonata, 15
Architectonica, see Solarium
Architectonica granulata, 19
Archobuccinum oregonensis, 45
Argonauta argo, 13
Argonauta hians, 103
Asaphis coccinea, 33
Asaphis deflorata, 33
Astraea americana, 21
Astraea brevispina, 17
Astraea buschi, 91
Astraea caelata, 17
Astraea calcar, 91
Astraea fimbriatum, 91
Astraea imbricata, 17
Astraea inermis, 91
Astraea longispina, 17
Astraea modestum, 91
Astraea olivaceum, 117
Astraea rugosum, 129
Astraea stellare, 91
Astraea sulcatum, 91
Astraea triumphans, 91
Astraea tuber, 17
Astraea undosa, 43
Astarte castanea, 21
Astarte rollandi, 55
Astarte undata, 31
Auriculastrum pellucens, 23

Barnea pacifica, 51
Barnea truncata, 37
Botula falcata, 51
Buccinum glacialis, 17
Buccinum undatum, 13
Bulla amygdala, 25
Bulla occidentalis, 23
Bulla striatus, 13
Bulla tenuissima, 119

Callistochiton decorata, 49
Calliostoma annulatum, 47
Calliostoma caniculatum, 13
Calliostoma costatum, 47
Calliostoma haliarchus, 125
Calliostoma jujubum, 15
Calliostoma jujubum perspectivum, 25
Calliostoma meyeri, 125
Calliostoma radicula, 27
Callista aurantiaca, 131
Callista erycina, 131
Callista kingi, 141
Callista planatella, 141
Callistochiton pulchellus, 119
Cancellaria cassidaeformis, 117
Cancellaria cooperi, 45
Cancellaria laticostata, 117
Cancellaria obesa, 107
Cancellaria reticulata, 27
Cantharus cencellaria, 19
Cantharus erythrostoma, 117
Cantharus gemmata, 109
Cantharus insignis, 107
Cantharus tinctus, 27
Capulus californicus, 47
Capulus hungaricus, 25
Cardita floridana, 37
Cardium auricula, 135
Cardium biangulatum, 141
Cardium cardissa, 135
Cardium ciliatum, 55
Cardium consors, 135
Cardium corbis, 49
Cardium elatum, 131
Cardium flavum, 131
Cardium groenlandicum, 55
Cardium magnum, 31

Cardium muricatum, 31
Cardium oblongum, 135
Cardium procerum, 131
Cardium ringens, 135
Cardium rusticum, 131
Cardium setosum, 131
Cardium substriatum, 53
Cardium unedo, 135
Cassis abbreviata, 105
Cassis achatina, 117
Cassis areola, 125
Cassis bandatum, 119
Cassis bicarinata, 119
Cassis bisulcata, 87
Cassis canaliculata, 87
Cassis coarctata, 87
Cassis cornuta, 85
Cassis crumena, 125
Cassis flammea, 5
Cassis glauca, 85
Cassis inflata granulosa, 5
Cassis inornata, 107
Cassis japonica, 105
Cassis pila, 117
Cassis plicata, 119
Cassis pyrum, 85
Cassis madagascarensis, 5
Cassis rufa, 85
Cassis saburon, 87
Cassis semigranosa, 87
Cassis strigata, 85
Cassis tenuis, 85
Cassis testiculus, 5
Cassis tuberosa, 5
Cassis turgida, 85
Cassis vibex, 85
Cassidaria echinophora, 113
Cavolina telemus, 23
Cavolina tridentata, 23
Ceratostoma foliatum, 45
Ceratostoma nuttalli, 43
Cerithium algicola, 19
Cerithium atratum, 39
Cerithium ebenus, 27
Cerithium minimus nigrescens, 21
Cerithidea californica, 47
Chaetopleura apiculata, 21
Chaetopleura gemma, 49
Chama congregata, 23
Chama exogyra, 47
Chama lobata, 135
Chama macerophila, 31-35
Chama pellucida, 51
Chama variegata, 37
Chenopus pes-pelicani, 121
Chione cancellata, 15
Chione fluctifraga, 53
Chione interpurpurea, 37
Chione latilirata, 39
Chione paphia, 33
Chione simillina, 53
Chione succincta, 53
Chiton squamosus, 21
Chiton tuberculatus, 119
Circe divaricata, 137
Circe rivularis, 139
Circe scripta, 137
Clathrodrillia leucoyma, 23
Codakia orbiculata, 31
Columbella mercatoria, 19
Columbella rusticoidea, 119
Columbraria tortuosa, 95
Columbrarium pagoda, 111
Colus islandicus, 9
Colus pygmaeus, 27
Conus abbas, 69
Conus achatinus, 67
Conus amadis, 69
Conus ammiralis, 67
Conus anemone, 109
Conus arenatus, 67
Conus augur, 71
Conus aulicus, 67
Conus auratus, 67
Conus aurantius, 69
Conus aurisiacus, 67
Conus betulinus, 67
Conus brazieri, 105
Conus bullatus, 71
Conus californicus, 47
Conus cancellatus, 109
Conus crocatus, 67
Conus daucus, 39
Conus eburneus, 109
Conus elisae, 67
Conus floridanus, 15
Conus floccatus, 71
Conus geographus, 69
Conus glaucus, 71
Conus gubernator, 67
Conus hebraeus, 71
Conus hebraeus vermiculatus, 71
Conus imperialis, 71
Conus imperialus fuscatus, 71
Conus interruptus, 109
Conus ione, 121
Conus kiiensis, 105
Conus lithoglyphus, 69
Conus magus, 67
Conus magus raphanus, 67
Conus mercator, 67
Conus miles, 67
Conus minimus, 71
Conus monile, 67
Conus mus, 15
Conus mustellinus, 67
Conus nebulosus, 39
Conus nocturnus, 67
Conus omaria, 109
Conus orbignyi, 109
Conus papilionaceus, 71
Conus peali, 19
Conus pennaceus, 109
Conus planorbis, 109
Conus pontificalis, 71
Conus princeps lineolatus, 69
Conus proteus, 7
Conus purpurascens, 127

Conus quercinus, 109
Conus regularis, 109
Conus retifer, 109
Conus rubiginosus, 67
Conus siamensis, 67
Conus sieboldi, 67
Conus spectrum, 67
Conus striatus, 71
Conus sulcatus, 71
Conus suratensis, 71
Conus telatus, 69
Conus tessellatus, 71
Conus textile, 69
Conus thalassiarchus, 69
Conus tulipa, 69
Conus vexillum, 71
Conus verrucosus, 23
Conus verrucosus stricticus, 19
Conus zonatus, 69
Corbis sowerbyi, 141
Corbula sulculosa, 135
Crassatella kingicola, 131
Crepidula aculeata, 19
Crepidula fornicata, 19
Crepidula glauca, 27
Crepidula onyx, 47
Crepidula onyx rugosa, 47
Crepidula plana, 25
Crucibulum imbricatum, 117
Crucibulum spinosum, 52
Cryptochiton stellari, 45
Cryptomya californica, 57
Cuspidaria costellata, 13
Cuma coronata, 107
Cyclina chinensis, 135
Cymatium cutaceum, 95
Cymatium doliarum, 95
Cymatium dunkeri, 115
Cymatium exilis, 95
Cymatium grandimaculatum, 95
Cymatium gutternum, 115
Cymatium kleineri, 105
Cymatium rubecula, 109
Cymatium scabrum, 95
Cymatium spengleri, 95
Cymatium tigrinus, 95
Cymatium tritornis, 95
Cymatium vespaceum, 109
Cymatium weigmani, 109
Cymbium porcinum, 85
Cymbium proboscidale, 85
Cypraea arabica, 79
Cypraea arabica reticulata, 79
Cypraea argus, 81
Cypraea arenosa, 109
Cypraea caput-serpentis, 81
Cypraea carneola, 109
Cypraea caurica, 79
Cypraea cervus, 17
Cypraea cervinetti, 127
Cypraea cineria, 25
Cypraea cribraria, 89
Cypraea cruenta, 81
Cypraea cylindrica, 81
Cypraea decipiens, 109
Cypraea exanthema, 17
Cypraea hungerfordi, 109
Cypraea isabella, 79
Cypraea isabella controversa, 79
Cypraea isabella limpida, 79
Cypraea isabella Mexicana, 79
Cypraea leucostoma, 79
Cypraea lynx, 81
Cypraea mappa, 79
Cypraea mauritiana, 79
Cypraea moneta, 81
Cypraea ocellata, 81
Cypraea onyx, 81
Cypraea pantherina, 79
Cypraea pantherina albonitens, 79
Cypraea pantherina obtusa, 79
Cypraea pantherina syringa, 79
Cypraea pantherina theriaca, 79
Cypraea scotti, 81
Cypraea scurra, 81
Cypraea spadicea, 45
Cypraea spurca, 25
Cypraea stolida, 81
Cypraea subviridis, 81
Cypraea talpa, 79
Cypraea tessellata, 81
Cypraea testudinaria, 79
Cypraea tigris, 79
Cypraea umbilicata, 79
Cypraea undata, 81
Cypraea ventriculus, 109
Cypraea vitellus, 81
Cypraea walkeri, 109
Cypraea xanthodon, 109
Cyprina islandica, 29
Cyrena floridana, 19
Cyrtodora siliqua, 29
Cytherea chemnitzi, 131
Cytherea hebraea, 17

Delphinula atacta, 107
Dentalium pretiosum, 53
Dentalium vernedei, 121
Desmoulea abbreviata, 113
Desmoulea retusa, 113
Diadora alternata, 37
Distorsio anus, 117
Distorsio clathrata, 27
Distorsio constrictus, 117
Divaricella dentata, 23
Divaricella quadrisulcata, 37
Dolium pomum, 111
Dolium ringens, 111
Dolium canaliculata, 103
Dolium galea, 13
Dolium perdix, 9
Dolium equals Tonna.
Donax californica, 53
Donax gouldi, 53
Donax variabilis, 23
Dosinia discus, 33
Dosinia circinaria, 137
Dosinia juvenilis, 137

Dosinia ponderosa, 137
Druopa horrida, 109

Eburna areolata, 113
Eburna japonica, 113
Eburna lutosa, 113
Eburna spiratus, 113
Eburna valentianus, 113
Echinella coronaria, 119
Echinella nodulosa, 19
Echinochama arcinella, 39
Engina turbinella, 21
Ensis americana, 33
Ensis californica, 47
Ensis directus, 33
Epitomium angulatum, 23
Epitomium crenatoides, 53
Epitomium hindsii, 53
Epitomium lineatum, 23
Epitomium pretiosa, 129
Entodesma saxicola, 53
Euglandina rosea, 13
Eugyrina subdistorta, 125
Eupleura caudata, 23

Fasciolaria distans, 7
Fasciolaria fusiformis, 67
Fasciolaria gigantea, 11
Fasciolaria princeps, 11
Fasciolaria tulipa, 5
Ficus papyratia, 7
Fissurella alternata, 25
Fissurella barbadensis, 19
Fissurella edititia, 19
Fissurella fasicularia, 15
Fissurella listeri, 25
Fissurella nodosa, 25
Fulgar canaliculata, 7
Fulgar eliceans, 7
Fulgar perversa, 7
Fulgar pyrum, 7
Fuscosurcula mirabilis, 115
Fusus dupetithouarsi, 107
Fusus laticostata, 115
Fusinus luteopictus, 49

Glottidea albida, 51
Glycymeris americana, 39
Glycymeris pectinata, 37
Glycymeris subobsoleta, 49
Gnathodon cuneata, 33

Halia prianus, 65
Haliotis asinina, 129
Haliotis cracherodi, 43
Haliotis cyclobates, 105
Haliotis emmae, 105
Haliotis fulgens, 105
Haliotis glabra, 105
Haliotis gigantea, 129
Haliotis japonica, 129
Haliotis midae, 129
Haliotis rufescens, 43
Haliotis pulcherrima, 129
Haliotis rugoso plicata, 129
Haminoea elegans, 23
Haminoea solitaria, 23
Haminoea succinea, 23
Harpa articularis, 101
Harpa conoidalis, 101
Harpa costata, 101
Harpa imperialis, 101
Harpa minor, 115
Harpa nobilis, 115
Heterdonax bimaculatus, 49
Hinnites giganteus, 51
Hipponyx antiquatus, 23
Hippopus maculatus, 135
Hysteroconcha lupinaria, 137
Hysteroconcha rosea, 137

Iphgenia braziliana, 33
Ishnochiton cariosus, 119
Ishnochiton conspicuus, 49
Ishnochiton clathratus, 49
Ishnochiton contractus, 119
Ishnochiton floridana, 25
Ishnochiton lineolatus, 119
Ishnochiton magdalensis, 45
Ishnochiton mertensi, 49
Ishnochiton proteus, 121
Ishnochiton regularis, 49
Ishnochiton torrei, 119
Ishnochiton tricostalis, 119
Ishnochiton virgatus, 121

Janthina exigua, 25
Janthina globosa, 21

Katherina tunicata, 45

Laevicardium mortoni, 37
Laqueus californicus, 49
Latiaxis japonica, 109
Latiaxis lischkeana, 121
Latiaxis mawae, 87
Latiaxis pagoda, 121
Latirus belcheri, 121
Latirus castanea, 107
Latirus cingulatus, 117
Latirus infundibulum, 21
Latirus nassatulus, 111
Latirus polygonus, 111
Latirus prismaticus, 105
Latirus turritus, 107
Lepidochiton marmorea, 21
Leucozonia cingulifera, 13
Leucozonia ocellata, 25
Lima inflata, 31
Lima lima, 31
Lima scabra, 31
Lima squamosa, 31
Lima tenera, 33
Lioconcha castrensis, 137
Lioconcha hieroglyphicula, 137
Lioconcha picta, 137
Lioconcha tigrina, 137
Lischkei argenteonitens, 125

Lithophaga bisulcatum, 23
Lithophaga caribaea, 37
Lithophaga nigra, 21
Lithophaga plumula, 47
Littorina angulifera, 19
Littorina irrorata, 19
Littorina littorea, 19
Littorina obtusata, 23
Littorina palliata, 23
Littorina zigzag, 19
Livonia pica, 9
Loripinus chrysostoma, 29
Loripinus edentula, 29
Lucapina adspersa, 25
Lucapina callomarginata, 53
Lucapina cancellata, 53
Lucina californica, 53
Lucina exasperata, 131
Lucina jamaicensis, 31
Lucina nassula, 23
Lucina pennsylvanica, 31
Lyonsia californica, 53
Lyonsia floridana, 23

Macoma balthica, 23
Macoma constricta, 37
Macoma fusca, 23
Macoma inconspicua, 55
Macoma indentata, 53
Macoma inquinata, 51
Macoma nasuta, 57
Macoma secta, 49
Macrocallista gigantea, 29
Macrocallista maculata, 29
Macron aethiops kelletti, 45
Macron lividus, 49
Mactra eximia, 139
Mactra fragilis, 37
Mactra obesa, 131
Mactra planulata, 57
Mactra trigonella, 139
Malleus albus, 139
Margaritifera radiata, 15
Marginella apicina, 23
Martesia cunaeformis, 13
Megalotractus proboscidifera 111
Megathura crenulata, 45
Melampus bidentatus, 23
Melampus coffeus, 19
Melampus lineatus, 23
Melo aethiopica, 77
Melo diadema, 77
Melo flammea, 107
Melo indica, 77
Melo regia, 77
Melongena corona, 9-15
Melongena corona belknapi, 27
Melongena galeodes, 117
Melongena melongena, 17
Melongena paradisica, 77
Meretrix petechialis, 137
Meretrix tripla, 137
Mitre chrysalis, 107
Mitra filaris, 105
Mitra glabra, 105
Mitra hanleyana, 105
Mitra intermedia, 107
Mitra plicaria, 105
Mitra plicata, 105
Mitra sanguisuga, 105
Modiola arborescens, 23
Modiola capax, 57
Modiola demissus, 21
Modiola modiolus, 33
Modiola opofix, 33
Modiola papyria, 23
Modiola plicatula, 29
Modiola rectus, 51
Modiola tulipa, 33
Modulus floridana, 23
Moniliopsis incisa ophioderma, 47
Moniliopsis pencillata, 47
Mopalia ciliata, 49
Mopalia cil. wossnessneckeri, 49
Mopalia muscosa, 49
Morum oniscus, 21
Mulinia lateralis, 23
Mulinia lat. corbuloides, 23
Murex aduncus, 59
Murex adustus, 61
Murex anguliferous, 61
Murex axicornis, 65
Murex bicolor, 65
Murex brandaris, 63
Murex brassica, 65
Murex cabritti, 15
Murex clavus, 63
Murex cornutus, 59
Murex denudatus, 115
Murex elegans, 59
Murex elongatus, 61
Murex endivia, 59
Murex eurypteron, 121
Murex festivus, 43
Murex fulvescens, 15
Murex gemma, 47
Murex haustellum, 61
Murex hexagonus, 39
Murex martinianus, 63
Murex megacerus, 65
Murex messorius, 15
Murex modesta, 121
Murex motacilla, 115
Murex nigrospinosus, 63
Murex occa, 61
Murex palmarosea, 57
Murex penchinati, 121
Murex pinnatus, 63
Murex phlorator, 61
Murex plicatus, 63
Murex pliciferous, 61
Murex pomum, 15
Murex princeps, 59
Murex ramosus, 65
Murex radix nigritus, 59
Murex recurvirostris, 115
Murex regius, 65
Murex rufus, 15

Murex rufus florifer, 35
Murex salebrosus, 65
Murex salleanus, 27
Murex saxatilis, 59
Murex spinicostata, 15
Murex spinosus, 65
Murex stainfurthi, 59
Murex tenuispina, 63
Murex ternispina, 63
Murex torrefactus, 61
Murex triformis, 115
Murex triqueter, 63
Murex troscheli, 127
Muricidae multangula, 19
Mya arenaria, 33
Mya cancellata, 53
Mytilimeria nuttalli, 51
Mytilis adamsiana, 47
Mytilis californica, 49
Mytilis exustus, 19
Mytilis hamatus, 33
Mytilis perna, 19
Mytilis recurva, 33

Nassa ambigua, 19
Nassa consensa, 23
Nassa fossata, 47
Nassa obsoleta, 19
Nassa perpinguis, 49
Nassa tegula, 47
Nassa trivitata, 23
Nassa vibex, 19
Nassarius magnifica, 117
Natica aleutica, 53
Natica canrena, 17
Natica clausa, 27
Natica, marcoana, 23
Natica pusilla, 23
Nautilus pompileus, 111
Neptunea decemcostata, 17
Nerita peleronta, 13
Nerita tessellata, 19
Nerita versicilor, 19
Neritina picta, 19
Neritina punctulata, 25
Neritina pupa, 19
Neritina reclivata, 19
Neritina virginea, 19
Norrissia norrisi, 45
Nucula proxima, 21
Nuculana acuta, 21
Nuculana concentrica, 33
Nuttallina californica, 49

Oliva angulata, 97
Oliva arenosa, 97
Oliva annulata, 97
Oliva, bulbosa, 105
Oliva caerulea, 97
Oliva circinata, 97
Oliva elegans, 97
Oliva erythrostoma, 97
Oliva evania, 97
Oliva fumosa, 97
Oliva ispidula, 105
Oliva kaleontana, 97
Oliva litterata, 15
Oliva mauritiana, 97
Oliva mustellina, 97
Oliva ornata, 97
Oliva peruviana, 105
Oliva pindarina, 97
Oliva porphyretica, 97
Oliva reticularis, 15
Oliva r. olorinella, 15
Oliva sanguinolenta, 97
Oliva sericea, 97
Oliva spicata, 97
Oliva spicata melcheri, 97
Oliva tessellata, 97
Oliva tremulina, 97
Oliva tricolor, 97
Oliva tigrina, 97
Oliva venulata, 97
Olivancillaria acuminata, 105
Olivancillaria auricularia, 105
Olivancillaria braziliana, 105
Olivancillaria cauta, 105
Olivancillaria gibbosa, 105
Olivancillaria steerae, 105
Olivancillaria subulata, 105
Olivella biplicata, 47
Olivella nivea, 23
Ostrea cristata, 21
Ostrea foliata, 21
Ostrea frons, 21
Ostrea lurida, 51
Ostrea permollis, 37
Ovula intermedia, 17
Ovula ovum, 103
Ovula volva, 121

Pachydesma stultorum, 53
Pandora filosa, 59
Paphridea spinosum, 57
Paphia laterisculca, 137
Paphia litterata, 137
Paphia papilionacea, 137
Paphia sulcosa, 141
Paphia turgida, 141
Patella caerulea, 123
Patella cretacea, 123
Patella ferruginea, 123
Patella granatina, 123
Patella granularis, 123
Patella kermadacensis, 123
Patella longicosta, 123
Patella neglecta, 123
Patella nigrosquamosa, 123
Patella oculus, 123
Patella plumbea, 123
Patella radians, 123
Patella testudinaria, 123
Patella transmerica, 105
Pecten bifrons, 141
Pecten circularis, 47
Pecten exasperatus, 35
Pecten fulvicostatus, 141

Pecten gibbus, 15
Pecten g. amphicostatus, 139
Pecten hericeus, 47
Pecten hinsii novarchus, 139
Pecten irradians, 15
Pecten islandicus, 33
Pecten is. beringiana, 55
Pecten jordani, 55
Pecten latiauritus monotimeris, 41
Pecten muscosus, 35
Pecten nodosus, 29
Pecten pallium, 139
Pecten radula, 141
Pecten singaporensis, 121
Pecten squamatus, 141
Pecten tegula, 133
Pecten trigris, 133
Pectenculus maculata, 131
Pectenculus equals Glycymeris
Pedalion alata, 31
Pedalion bicolor, 21
Pedalion chemnitziana, 37
Periploma discus, 55
Periploma planiuscula, 53
Petricola carditoides, 53
Petricola pholadiformis, 37
Pholadidea ovoidea, 57
Pholadidea parva, 51
Pholas costata, 13
Phos candei, 27
Pinna rigida, 39
Pinna seminuda, 33
Pinna serrata, 33
Pisania pusio, 21
Pitar fulminata, 39
Planaxis nucleus, 19
Platycodon cancellata, 57
Pleurotomaria hirasei, 103
Plicatula gibbosa, 37
Plicatula spondyloidea, 33
Pododesmus decipiens, 21
Pododesmus macrochisma, 51
Polinices bicolor, 105
Polinices duplicata, 15
Polinices heros, 21
Polinices lactea, 23
Polinices lewisii, 43
Polinices recluziana, 45
Psammobia californica, 53
Pseudomelatoma moesta, 47
Pteria colymbus, 33
Pterocera aurantia, 93
Pterocera elongata, 93
Pterocera lambis, 93
Pterocera millepeda, 93
Pterocera rugosa, 93
Pterocera scorpio, 93
Pterocera violacea, 93
Pusionella nifat, 113
Pyramidella crenulata, 23
Pyramidella dolobrata, 23

Raeta canaliculata, 31
Ranella albivaricosa, 87
Ranella bufonia, 87
Ranella californica, 43
Ranella corrugata, 121
Ranella crumena, 87
Ranella granifera, 87
Ranella gyrina, 87
Ranella lampas, 87
Ranella pulchra, 83
Ranella ranelloides, 117
Ranella rhodostoma, 87
Ranella spinosa, 87
Rangia cuneata, 33
Rupellaria typicum, 37

Sanguinolaria nuttalli, 57
Saxicava arctica, 33
Saxicava rugosa, 33
Saxidomus nuttalli, 51
Searlesia dira, 47
Scalaria see Epitomium
Scutus ambiguus, 123
Semele bella-striata, 23
Semele decisa, 53
Semele orbiculata, 37
Semele proficus, 37
Semele purpurascens, 37
Semele rupicola, 47
Semele rubropicta, 57
Septifer bifurcatus, 49
Serpulorbis decussata, 37
Siliqua patula, 57
Siliquaria see Tenegodus
Simnia uniplicata, 19
Sinum debile, 53
Sinum perspectivum, 27
Siphonalia cassidiformis, 105
Siphonalia filosus, 121
Siphonalia fusoides, 121
Siphonalia, nodosa, 117
Siphonalia pallida, 109
Siphonalia spadicea, 121
Siphonalia trochula, 105
Siphonaria alternata brunnea, 19
Siphonaria lineolata, 19
Solarium maxima, 125
Solen rosaceus, 117
Soletellina biradiata, 135
Spirula spirula, 25
Spondylus americana, 29-55
Spondylus acanthus, 139
Spondylus avicularis, 133
Spondylus coccineus, 127
Spondylus crassisquama, 133
Spondylus, ducalis, 133
Spondylus gaederopus, 133
Spondylus gussoni, 35
Spondylus hystrix, 133
Spondylus japonica, 127
Spondylus nicobarica, 133
Stenochiton longicymba, 119
Strigilla carinaria, 33
Strombus auris dianae, 83
Strombus bituberculatus, 37

Strombus campbelli, 83
Strombus canarium, 83
Strombus costatus, 7
Strombus epidromus, 107
Strombus fasciata, 83
Strombus floridus, 83
Strombus galeatus, 83
Strombus gibberulus, 109
Strombus gigas, 5
Strombus gracilior, 93
Strombus granulatus, 83
Strombus isabella, 125
Strombus japonica, 125
Strombus latissimus, 83
Strombus lentiginosus, 87
Strombus luhuanus, 93
Strombus marginatus, 107
Strombus mauritiana, 125
Strombus, melanastoma, 125
Strombus minimus, 83
Strombus pugilis, 17
Strombus succinctus, 83
Strombus thersites, 83
Strombus variabilis, 83
Sunetta excavata, 139
Sunetta scripta, 137
Surculites carpenteriana, 45

Tagelus californianus, 49
Tagelus divisus, 37
Tagelus subteres, 51
Tapes see Paphia
Tectarias muricatus, 19
Tectarias pagodus, 103
Tegula aureotincta, 47
Tegula brunnea, 47
Tegula excavata, 21
Tegula funebralis, 43
Tegula fasciatus, 19
Tegula ligulata, 47
Tellina albinella, 141
Tellina aurora, 37
Tellina capsoides, 141
Tellina elegans, 141
Tellina idae, 55
Tellina interrupta Mexicana, 37
Tellina lineata, 19
Tellina radiata, 31
Tellina r. unimaculata, 31
Tellina saya, 23
Tellina salmonea, 141
Tellina scobinata, 139
Tellina staurella, 139
Tellina virgata, 139
Tenegodus anguina, 119
Tenegodus weldii, 107
Terebra concava vinosa, 19
Terebra chlorata, 107
Terebra cingulata, 101
Terebra cingulifera, 101
Terebra crenulata, 101
Terebra dislocata, 27
Terebra hastata, 23
Terebra maculata, 101
Terebra monilis, 101
Terebra protexta, 19
Terebra oculata, 101
Terebra pretiosa, 101
Terebra pulchella, 101
Terebra robusta, 127
Terebra strigata, 127
Terebra strigillata, 101
Terebra triseriata, 101
Terebralia occidentalis, 51
Terebratalia transversum, 51
Terebratella rubicunda, 107
Terebratulina caput-serpentis, 13
Thais bufo, 121
Thais deltoides, 21
Thais floridana, 13
Thais emarginata, 47
Thais haustrum, 125
Thais lamellosa, 47
Thais lapillus, 17
Thais lima, 47
Thais mancinella, 125
Thais patula, 9
Thais pica, 125
Thais rudolphi, 125
Thais succincta, 125
Thais textilosa, 103
Thais tuberculata, 117
Thais undata, 39
Thatcheri mirabilis, 103
Thracia beringi, 55
Thracia curta, 53
Tibia curvirostris, 111
Tivela stultorum, 53
Tonna see Dolium
Tonicella hartwegi, 49
Tonicella lineata, 45
Tridacna, crocea, 127
Tridacna squamosa, 127
Transanella conradina, 23
Trichotropis cancellata, 49
Triton aquatilis, 27
Triton femorale, 7
Triton nobilis, 5
Triton olearum, 7
Triton tuberosum, 15
Triton see Cymatium
Tritonalia cellulosa, 19
Tritonalia circumtexta, 47
Tritonalia poulsoni, 43
Trivea pediculus, 19
Trophon craticulatus, 23
Trophon triangulatus, 47
Turbinella scolymus, 5
Tudicle spinosa, 115
Turbo argyrostoma, 89
Turbo castaneus, 23
Turbo c. crenulatus, 21
Turbo coronata, 109
Turbo chrysostoma, 91
Turbo cornutus, 89
Turbo fluctuosus, 91
Turbo gruneri, 107
Turbo imperialis, 89

Turbo intercostalis, 91
Turbo lamellosus, 89
Turbo lugubris, 91
Turbo marmoratus, 89
Turbo natalensis, 89
Turbo petholatus, 89
Turbo porphyrites, 109
Turbo radiatus, 91
Turbo sarmaticus, 91
Turbo setonis, 103
Turbo setosus, 91
Turbo smaragdus, 91
Turbo stenogyra, 121
Turbo stramineus, 89
Turbo tessellatus, 93
Turbo ticaonicus, 89
Turbo torquatus, 89
Turbo undulatus, 93
Turcicia coreansis, 125
Turcicia crumpi, 125
Turris bijubata, 113
Turris coffea, 113
Turris cosmoi, 121
Turris crispa, 107
Turris fascialis, 121
Turris fusca, 113
Turris grandis, 113
Turris granosa, 107
Turris javana, 113
Turris kaderlyi, 107
Turris muricata, 113
Turris unedo, 107
Turritella attenuata, 99
Turritella bacillum, 99
Turritella bicingulata, 99
Turritella broderipiana, 99
Turritella cingulata, 99
Turritella columnaris, 99
Turritella cooperi, 47
Turritella duplicata, 99
Turritella flammulata, 121
Turritella goniostoma, 99
Turritella maculata, 99
Turritella nodulosa, 99
Turritella terebra, 99
Turritella tigrina, 107
Turritella vittata, 99
Tydolina fungiana, 47

Urosalpinx cinerea, 19
Urosalpinx Mexicana, 25
Urosalpinx tampaensis, 19

Vasum capitellum, 113
Vasum cassidiformis, 113
Vasum ceramicum, 113
Vasum cornigerum, 113
Vasum muricatum, 15
Venericardia barborensis, 47
Venerupis lamellifera, 37
Venerupis straminea, 53
Venus alboradiata, 29
Venus campeachensis, 29
Venus guiidia, 137
Venus lamellata, 137
Venus mercenaria, 29
Venus notata, 29
Venus texana, 29
Verconella pyrulata, 107
Vermetus filosus, 119
Vermetus nigra, 105
Vermetus nigricans, 15
Vermetus novahollandiae, 119
Vermetus radicula, 27
Vermetus sipho, 107
Vermicularia spirata, 9
Vola alba, 141
Vola laqueata, 141
Vola maxima, 133
Voluta ancilla, 75
Voluta angulata, 73
Voluta braziliana, 75
Voluta bullata, 75
Voluta cancellata, 115
Valuta caroli, 77
Voluta cumingii, 115
Voluta cymbiola, 75
Voluta davisii, 115
Voluta delessertiana, 77
Voluta delicata, 115
Voluta elliotti, 75
Voluta festiva, 75
Voluta fulgetrum, 73
Voluta fusiformis, 73
Voluta gatliffi, 75
Voluta harpa, 73
Voluta hebraea, 77
Voluta hirasei, 127
Voluta imperialis, 73
Voluta junonia, 7
Voluta lyriformis, 77
Voluta maculata, 77
Voluta magnifica, 73
Voluta mamilla, 73
Voluta mentiens, 115
Voluta mitraeformis, 77
Voluta musica, 73
Voluta pacifica, 73
Voluta papillosa, 75
Voluta piperita, 73
Voluta prevostiana, 75
Voluta pulchra, 115
Voluta ruckeri, 75
Voluta rupestris, 127
Voluta scapha, 77
Voluta undulata, 75
Voluta undulata angasi, 77
Voluta vespertilip, 73
Voluta vexillum, 75
Voluta virescens, 7
Voluta zebra, 77
Volutharpa haysiana, 49

Waldhemia flavescens, 141

Xenophora cochyliophorus, 9
Xenophora pallidula, 103

Yoldia limatula, 33

Zirfaea crispata, 13

INDEX OF COMMON NAMES

Abbreviated Turbine, 17
Adams Mussel, 47
Agate Chama, 51
African Murex, 59
African Horned Murex, 59
Aladdin Lamp, 33
Alphabet Cone, 7
American Turbine, 21
Ancient Hoof Shell, 52
Angel-wing, 13
Angular Dog Whelk, 33
Angular Murex, 61
Angular Triton, 7
Angular Unicorn Shell, 47
Angular Wentletrap, 23
Angular Winkle, 19
Arabian Cowry, 79
Apple Murex, 15
Arctic Bulls-eye, 53
Arctic Saxicave, 33

Baby Bonnet, 5
Baby Bulls-eye, 23
Beby Ear, 37
Baby Giant Clam, 127
Bailer Shell, 77
Band Shell, 11
Banded Chione, 53
Banded Pink Murex, 65
Banded Spiney Murex, 63
Banded Thais, 21
Banded Tulip, 7
Banded Wentletrap, 23
Basket Cockle, 49
Bat Volute, 73
Bearded Cockle, 33
Big Saddle, 13
Bird Shell, 37
Black Abalone, 43
Black Ark, 15
Black and White Nerita, 19
Black Asiatic Murex, 61
Black Dog Whelk, 19
Black Horn Shell, 21
Black Horse Mussel, 57
Black Katy, 45
Black Lace Murex, 15
Black Murex, 59
Black Mussel, 33
Black Oyster, 21
Black Planaxis, 19
Black Rock Borer, 21
Black Top Shell, 43
Black Top Thais, 47
Black Tip Murex, 63
Bleeding Tooth, 13
Bloody Ark, 33
Blue Abalone, 43
Branch Ribbed Mussel, 49
Branded Murex, 63
Brown Astarte, 21
Brown Crown Shell, 17
Brown Rock-eating Mussel, 23
Brown Vola, 35
Bulls-eye, 15
Bullmouth, 85
Buttercup, 29

Calico Scallop, 15
Calico Shell, 29
Calico Top Shell, 19
California Cap Shell, 47
California Chiton, 49
California Cone, 47
California Calf Cowry, 81
California Frog Shell, 45
California Horn Shell, 47
California Lamp Shell, 43
California Lions Shell, 53
California Lucine, 53
California Mussel, 49
California Razor Clam, 47
California Soft-shell Clam, 47
California Wedge Shell, 53
Cameo Shell, 85
Canoe Shell, 19
Carpenters Tower Shell, 45
Cask Shell, 111
Cats Paw, 33
Channelled Cask Shell, 13
Channelled Dog Whelk, 19
Channelled Top Shell, 13
Channelled Whelk, 17
Checked Hairy Shell, 49
Checked Soft-shell Clam, 53
Chestnut Cowry, 45
Chinese Murex, 63
Circular Bulls-eye, 21
Circular Rock Shell, 47
Clear Ear Shell, 23
Clipped Semile, 53
Cockle, 31
Coffee Shell, 15
Coiled Worm Shell, 37
Collectors Shell, 9
Columbian Amphissa, 47
Comb Shell, 37
Common Bulls-eye, 15
Common Chiton, 21
Common Cockle, 31
Common Mussel, 33
Common Purpura, 13
Common Scallop, 15
Common Whelk, 13
Common Winkle, 19
Constricted Macoma, 37
Conspicuus Chiton, 49
Coon Oyster, 21
Coopers Cancellaria, 45
Coquina, 23
Corrugated Turbine, 17
Cup and Saucer Shell, 52

Curved Mussel, 33

Dark False Limpet, 19
Decorative Chiton, 49
Dentate Divaricella, 23
Doleful Tower Shell, 47
Dotted Cone, 67
Dotted Volute, 7
Drill Shell, 19
Duck-foot, 13
Dwarf Winkle, 23
Dye Shell, 9

Eastern Thorny Oyster, 29-35
East India Clam, 135
Egg Shell, 103
Eyed Cowry, 81
Egg-shell Cockle, 53
Eggs Fasciolaria distans, 53
Eggs Fulgar canaliculata, 23
Eggs Murex festivus, 23
Eggs Ranella affine, 23
Elegant Venus, 33

False Ark, 37
False Limpet, 19
False Wavey Chione, 53
Fan Shell, 33
Fat Dog Whelk, 49
Festive Rock Shell, 43
Fig Shell, 7
Fighting Conch, 17
File Limpet, 47
Fine-lined Artemus, 33
Finger Limpet, 47
Flat File Shell, 31
Flat Razor Clam, 57
Flat Mactra, 57
Florida Cone, 15
Florida Drill Shell, 19
Florida Rock Dweller, 37
Florida Staircase Shell, 19
Florida Weaver Shell, 19
Fluted Turbine, 17
Foliated Oyster, 21
Fragile Clam, 23
Fragile Mactra, 27
Fragile Worm Shell, 37
Frail Bubble Shell, 23
Frail Bulls-eye, 53
Frog Shell, 87
Fringed White Murex, 61
Furbelow Clam, 127

Gem Chiton, 49
Gemmed Rock Shell, 47
Gem Shell, 23
Giant Macoma, 49
Gilded Top Shell, 47
Glacial Whelk, 17
Globe Purple Snail, 21
Goldmouth, 91
Goulds Wedge Shell, 53
Granular Cassis, 5
Great Cap, 23
Great Conch, 55
Great Heart, 31
Great Horse Mussel, 47
Great Keyhole Limpet, 45
Great Piddock, 13
Great Scallop, 133
Great Tivela, 53
Great White Lucine, 31
Green Snail, 89
Greenish Yoldia, 33
Greenland Cockle, 55
Greenland Venus, 49
Green Top Shell, 21

Hairy Ark, 37
Hairy Chiton, 49
Hairy Triton, 7
Hard-edge Limpet, 53
Hartwegs Chiton, 49
Hat Shell, 31
Heart-shaped Rock-dweller, 53
Hooked Peapod Shell, 51
Horse Conch, 11

Iceland Scallop, 33
Idas Telline, 55
Imperial Cone, 71
Imperial Turbo, 89
Indented Macoma, 53
Inflated File Shell, 31
Ivory Shell, 113
Ivory Bulls-eye, 23

Jamaica Lucine, 39
Japanese Thorny Oyster, 127
Jewel Box, 31-35
Jordans Scallop, 55

Kelletts Macron, 45
Keyhole Limpet, 19
Kid Conch, 27
Kieners Cowry, 127
King Helmet, 5
Knobby Cingula, 13

Laminated Rock Venus, 57
Lamp Shell, 5
Leafy Hornmouth, 45
Left-handed Chama, 23
Left-handed Fulgar, 7
Lettered Olive, 15
Lewis's Bulls-eye, 43
Lined Dog Whelk, 21
Lined Murex, 15
Lions Paw, 29
Little Augur, 19
Little Black Mussel, 21
Little Brown Mussel, 19
Little Cardium, 37
Little Cap, 23
Little Cats Eye, 23
Little Chiton, 21
Little Dipper, 13
Little False Murex, 19
Little File, 33
Little Keyhole Limpet, 37

Little Lucine, 23
Little Macoma, 55
Little Mottled Venus, 37
Little Nautilus, 37
Little Olive, 15
Little Piddock, 13
Little Purple Clam, 19
Little Purse Shell, 21
Little Razor Clam, 37
Little Red Murex, 15
Little Red Telline, 19
Little Spindle, 25
Little Violet Snail, 53
Little Whelk, 17
Little White Ark, 21
Little White Cone, 25
Livid Macron, 47
Lurid Oyster, 51
Lynx Cowry, 81

Magdalena Bay Chiton, 45
Magpie, 9
Map Cowry, 79
Martins Murex, 63
Marlinspike, 101
Medium Ark, 49
Mertons Chiton, 49
Mexican Telline, 37
Micromac Cowry, 17
Milk Strombus, 7
Mole Cowry, 79
Money Cowry, 81
Mossy Ark, 15
Mossy Chiton, 49
Mottled Bubble Shell, 23
Mottled Cask Shell, 9
Mottled Clam, 37
Mottled Dog Whelk, 19
Mottled Dove Shell, 10
Mottled Terebra, 127
Mouse Cone, 15
Mourning Cowry, 79
Mouse Cowry, 81
Mushroom Umbrella Shell, 47
Music Shell, 73

Nautilus Shell, 111
Nobby Button, 23
Nobby Engina, 21
Nobby Tectarias, 19
Nobby Top Shell, 21
Northern Lamp Shell, 13
Norris Top Shell, 45
Nuttalls Hornmouth, 43
Nuttalls Sanguinaria, 57
Nuttalls Saxidome, 51
Nuttalls Sea Bottle, 57
Nut Cowry, 19
Nut Shell, 21

Obelisk Shell, 23
Occllated Cowry, 81
Onyx Cowry, 81
Operculum, 89
Oregon Triton, 45

Oval Piddock, 51

Pacific Piddock, 51
Pagoda Shell, 111
Painted Chiton, 21
Painted Spindle, 47
Paper Fig Shell, 7
Paper Mussel, 23
Paper Nautilus, 13
Panther Cowry, 79
Partridge Shell, 9
Pearly Monia, 51
Peals Cone, 19
Pear Fulgar, 7
Pearl Shell, 89
Pennsylvania Lucine, 31
Periwinkle, 19
Pholos in Rock, 51
Pink-colored Nerita, 19
Pink Murex, 65
Pilsbrys Volute, 127
Pink Scallop, 47
Pisa Shell, 21
Plate Limpet, 52
Plicate Murex, 63
Plicate Mussel, 29
Pointed Nuculana, 21
Pointed Venus, 37
Polluted Macoma, 51
Poulsons Rock Shell, 43
Prescious Tusk Shell, 53
Princess Murex, 59
Prickly Slipper Shell, 19
Princess Conch, 5
Purple-hinge Scallop, 51
Purple Cone, 127
Purple Olive, 47
Purple Poached Egg, 19
Purple Semile, 23
Purse Shell, 31

Quahog, 29
Queen Helmet, 5

Rayed Cockle, 23
Razor Shell, 33
Recluz Bulls-eye, 45
Red Abalone, 43
Red Cantharis, 19
Red-lined Chiton, 45
Red Spiney Oyster, 35
Regular Chiton, 49
Reticulated Cowry, 79
Reticulated Ark, 37
Reverse Chama, 47
Ribbed Rock Venus, 53
Ribbed Top Shell, 47
Rice Shell, 23
Ridged False Murex, 19
Ridged Latirus, 21
Ridged Mottled Top Shell, 15
Ridged Venus, 15
Ringed Top Shell, 47
Right-hand Fulgar, 7
Rock-eating Mussel, 47

Rock-dwelling Semile, 47
Rock Worm Shell, 15
Rose Murex, 65
Rose Petal, 23
Rosy Glandina, 15
Rosy Razor Clam, 47
Rough File Shell, 31
Rough Limpet, 47
Rough Thais, 47
Round Lantern Shell, 55

Saddle Oyster, 33
Sad Unicorn Shell, 45
Salmon-colored Tellin, 53
Saw-edge Oyster, 21
Says Tellin, 23
Scallop, 15
Scaly Oyster, 37
Scorpion Shell, 93
Scotch Bonnet, 5
Seaweed Limpet, 49
Shield Limpet, 47
Short Thracia, 55
Silver Lantern Shell, 53
Silver Lip, 87
Silver Mouth, 89
Simpsons Antigona, 53
Slender Mussel, 35
Slipper Shell, 19
Small Horn Murex, 65
Smooth Chione, 53
Snipe-bill Murex, 61
Snake Head Cowry, 81
Soft-shell Clam, 33
Spider Shell, 93
Spike Murex, 63
Spiney Pearl Shell, 15
Spiney Chama, 39
Spiney Tectarias, 19
Spiney Turbine, 17
Spiney Turbo, 89
Spirula, 25
Sponge Scallop, 35
Spotted Bubble Shell, 13
Spotted Bulls-eye, 17
Spotted Cowry, 17
Spotted Dove Shell, 19
Spotted False Wedge Shell, 49
Spotted Neritina, 17
Spotted Volute, 7
Spotted Winkle, 19
Satinforths Murex, 59
Striated Cone, 71
Striped Coffee Shell, 23
Striped Cassis, 85
Striped Keyhole Limpet, 19
Striped Mussel, 19
Striped Neritina, 19
Striped Terebra, 127
Striped Venus, 33
Straight Horse Mussel, 51
Subcircular Razor Clam, 51
Sunray Shell, 29
Sunset Shell, 31

Sun and Moon Shell, 133

Tent Cone, 69
Thorny Oyster, 127
Three-ridged Murex, 23
Tiger Cowry, 79
Tile-roof Dog Whelk, 47
Transverse Ark, 37
Transverse Lamp Shell, 52
Trellised Chiton, 49
Triangular Clam, 23
Trumpet Shell, 5
Tubed Turbine, 17
Tulip Shell, 5
Turkey Wing, 33
Turks Cap, 91

Unequal Ark, 33

Variegated Chama, 37
Vase Shell, 15
Venus Comb, 63
Venus Heart, 47

Wavy Turbine Shell, 47
Weaver Shuttle Shell, 121
Wegmans Triton, 127
Western Lamp Shell, 51
White Abalone, 43
White Amiantis, 55
White Ark, 21
White Augur, 19
White Cap Limpet, 53
White Colus, 9
White Horn Shell, 19
White-mouth Triton, 15
White Obelisk Shell, 23
White Murex, 65
White Piddock, 37
White Semile, 37
White Slipper, 37
White-striped Neritina, 19
White Tongue Shell, 51
White Turris, 23
White Spike Murex, 15
Widow, 15
Winged Ranella, 83
Winged Murex, 59
Wood Louse, 21
Worm Shell, 9
Wosnessenski Chiton, 49
Wrinkled Thais, 47

Yellow Apolymetis, 49
Yellow Helmet, 85
Yellow Lucine, 31
Yellow Olive, 97
Pellow Oyster, 37
Yellow Rock Shell, 35
Yellow Scorpion, 93

Zebra Periwinkle, 19
Zebra Volute, 77

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